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STEAM NAVIGATION, COMMERCE, FINANCE,

INSURANCE, BANKING, MINING, MANUFACTURES.

HENRY V. POOR, *Editor.*

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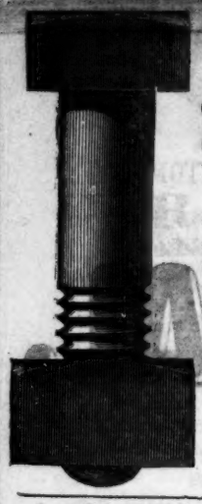

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☞ MR. FREDERIC ALGAR, No. 11 Clements Lane, Lombard Street, LONDON, is the authorized European Agent for the *Journal*.

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American Railroad Journal.

PUBLISHED BY J. H. SCHULTZ & CO. No. 9 SPRUCE ST.

New York, Saturday, June 8, 1861.

Shamokin Valley and Pottsville Railroad.

This company was incorporated March 25, 1858, and is successor to the Philadelphia and Sunbury Railroad Company, chartered under the title of Danville and Pottsville Railroad Company in 1826. The construction of the western portion of the road, from Sunbury to Shamokin, 19 miles, was commenced in 1830, and completed within two or three years from that time. It was used for several years for the transportation of coal; but being an imperfectly constructed work, was abandoned. The eastern portion, from Pottsville, over the Broad Mountain, in the Mahanoy Coal Field, 11 miles, was also commenced in 1830, and completed in 1832. This was also abandoned, after being in use a short time. Towards construction, the State guarantied the interest on $300,000 of the Company's 5 per cent. bonds. In 1850, an act was passed authorizing the sale of the road; and a new company was organized, under the title of Philadelphia and Sunbury Railroad Company, by which the western portion of the road was re-constructed, and an extension built to Mt. Carmel. In 1858, the property and franchise of the company were transferred to the present owners. The capital stock authorized is $1,500,000; of which $864,450 has been paid—an increase since the last report of $1,650. The funded debt amounts to $822,117 50—an increase of $270. The funded debt consists of: $700,000 1st mortgage 7 per cent. bonds, payable in 1872; $89,970 6 per cent. bonds, convertible at pleasure; and $32,147 6 per cent. bonds (funded coupons) payable in 1863—the interest upon all the bonds is payable semi-annually in Philadelphia. The length of the main line, from Sunbury to Mt. Carmel, is 28.03 miles; length of branch to the Lancaster Colliery, 1.12 miles; siding, turn-outs, etc., about 2 miles. From the report of this company for the past year we have obtained the following:

The tonnage of the road for the year ending March 31, 1861, has been of coal...222,036 tons.
Of other articles.....10,162 "

Total.....232,198 tons.

The gross earnings for the year have been		$114,126 60
All expenses, including drawbacks		52,278 38
Net profits		$61,848 22
—showing a ratio of expenses to earnings of 45.8 per cent.		
The rents from colliery were	$7,337 17	
Expenses, including taxes and insurance	3,057 10	
		4,280 07
Total profits		$66,128 29
The interest on 1st mort. bonds is	$49,000 00	
The interest on funded coupons	2,250 04	
General interest and exchange account	506 89	
		51,756 93
Showing an excess of		$14,371 36

The Board has had reason to be satisfied with the steady growth of business upon their road until the present crisis in political affairs.

The increase in amount of convertible loan ($270) is owing to the holder of $1,500, of second mortgage loan of Philadelphia and Sunbury Railroad Company, having paid in 18 per cent. of face of the bonds as was done by the other bondholders before the organization of this Company. The capital stock is increased correspondingly by 33 shares issued to the holder of these bonds in conformity with the resolutions passed April 3rd, 1858, at the stockholders' meeting.

The Board also ask authority of the stockholders to issue one hundred shares of capital stock in order to complete arrangements which they have made to compromise with judgment creditors of the old Philadelphia and Sunbury Railroad Company, and obtain possession of that part of our road which lies in Schuylkill county.

It is important to mention in this connection that the Board have had under consideration the expediency of completing our road through to Pottsville, and that the subject still engages their attention.

The Mine Hill Railroad Company in October last completed the extension of their road to Locust Gap, thus forming a connection with us at that point. The Board anticipate a considerable through business and local trade with Schuylkill county over this route as soon as arrangements can be perfected with other companies.

The road and mines are in good condition for the business of the present year.

BALANCE SHEET, April 2, 1861.

	Dr.
Railroad	$1,241,486 65
Locomotives	29,102 64
Freight, coal and passenger cars	66,782 78
Uncollected tolls	8,428 53
Coal lands	301,400 00
Coal breaker and miner's houses	60,000 00
Real state	1,604 50
Cash	7,734 51
Bills receivable	2,401 57
Eastern division of road	2,076 22
Coupon account	2,467 50
Coal rents due	742 49
Total	$1,724,227 39
	Cr.
Capital stock	$864,450 00
Mortgage bonds	700,000 00
Convertible loan	89,970 00
Interest on do.	16,148 38
Funded coupons	32,147 50
Interest on do.	194 08
Coupons on bonds	1,260 00
Bills payable	8,328 87
Check rolls for March, since paid	2,741 58
Profit and loss	8,986 98
Total	$1,724,227 39

The office of the company is in Philadelphia. The officers are:

President—JAMES S. BIDDLE.
Treasurer—JOHN L. GODDARD.
Superintendent—A. R. FISKE, Shamokin, Pa.

☞ The New York Central Railroad continues to bring down heavy supplies of cattle—nearly 3,800 head during the past week.

Vergnes' Voltaic Battery.

Professor Vergnes has invented a Voltaic Battery of extraordinary power, intensity and economy. For telegraphic purposes, where those three qualities are desirable, it surpasses any other known to science. It is a late invention, but it has been several months in use on one of the most important lines in this country where its results have been very satisfactory. Hitherto Groves' Battery has been considered the best; but it has now been demonstrated by scientific tests, as well as by its practical working, in the hands of men whose knowledge and experience qualify them to determine it, that this Battery is superior to Groves' in many respects.

First, in intensity. It is found that two of his cells will produce a current as intense as three of Groves'.

Secondly, in quantative power. Two of his cells will produce as great a quantity of magnetic power as three of Groves'.

Thirdly, in economy. The quantity of nitric acid required for a given number of his cells is only one-third of that required in Groves'.

Fourthly, in saving time. This battery can remain at least a week in constant action without interrupting the current even when refreshing the cells. Groves' battery must be taken down, changed, and put up again every day.

Fifthly, in comfort and safety while using it. The disagreeable fumes arising from all other acid batteries, so obnoxious to employees and so destructive to health, are not perceptible in his battery.

Sixthly, in the steadiness of the current; owing to the confinement of his extreme elements in an inner jar the current is steady, equal, and constant in stormy weather, while that of Groves' is jerking and uncertain. Electricians can appreciate the value of this quality.

More recently the Professor has discovered new elements to be used instead of obnoxious acids, and made other improvements in his battery which make it more powerful and render its use much more economical than while it was being subjected to the scientific tests and working for telegraphic purposes.

In electro-plating, electrotyping, and wherever *Electricity* is to be made available for the uses of man, this Battery must inevitably supersede all others known to science. It is, as philosophers say, a step onwards.

Having discovered some hitherto unknown laws of electricity, and thereupon seeing the want of the proper instruments for making those laws available, he has invented a new mode for making the helix or coil of wire to produce a more powerful magnet. His discoveries have enabled him to increase its power threefold. By means of this new helix his extraordinary battery is now profitably applied to locomotives to increase their adhesive power. Of course, it is well known that there are two powers operating upon an engine in moving a train of cars—one is the *adhesive* power caused by the dead weight on its driving wheels, the other its *propelling* power produced by its steam apparatus. The former is increased or diminished by changing the quantity of dead weight, the latter by the change in the construction of is machinery. Almost all locomotives have more steam power than adhesive power, some have 20 to 40 per cent. more; no one is made with less, generally the calculations are made for a dry level rail where the adhesive power is the greatest. Hitherto the adhesive power has been increased to some extent in emergencies by the use of sand on the rails, and for this purpose an expensive apparatus is attached to the locomotive, and the sand must be of a particular kind and considerable pains taken in its preparation.

The dead weight of the engine, with the assistance which the sand will afford, determines the quantity of freight which can be moved, having reference to the condition of the rails, whether wet by rains, dews or fogs, or made slippery by frost, or snow, and always, of course, to the grades to be overcome. Great weight and sand are both required to transport any considerable load on almost all the railways that have been made, but both are very destructive. It is not the weight of the freight or passenger cars which destroys the rails, cross-ties, embankments and bridges, but the weight of the locomotives. When the rails are in bad condition, the driving wheels are deprived of much of their adhesive power, often fifty per cent., consequently a portion of the train must be left on the way, it must run behind time, and a proportionate quantity of steam power is rendered useless. The use of sand on such occasions, while it increases the adhesive power, is more destructive than even the dead weight. It needs no argument to prove the importance of obtaining an adhesive power equal to the steam power, no matter what may be the condition of the track, without resorting to dead weight or to sand. This desirable object, *this great economy* is now obtained by the use of Professor Vergnes' Battery and Helix. Hereafter, no more weight need be employed than is required for strength, and the use of sand can be wholly dispensed with. A light locomotive can do the work of a heavy one.

It is believed that locomotives can be constructed of steel or of Howell's homogenous metal with sufficient strength, but with only about one-half of the present weight. Who can estimate the value of such an improvement to the railroad investments in this country to say nothing of other countries?

This apparatus can be applied to almost all of the existing locomotives whereby they can be made as efficient when the rails are in a bad condition as when dry; in other words, the adhesive power may now be made equal to the propelling power under all circumstances. No alteration need be made. Herein is one of its advantages. The cost of the apparatus is but trifling compared with it is value, and it can be affixed without inconvenience, while the locomotive is being cleaned, or is undergoing some slight repairs. It is supposed that by means of this improvement the efficiency of the existing locomotives may be increased at least fifty per cent., that is, two locomotives may be enabled to perform the task of three—all the difficulties and breakages arising from the extraordinary slipping of the wheels in bad weather as well as in good, are by this improvement avoided, and the facilities for overcoming heavy grades are greatly increased. It is estimated that the ordinary slipping of the wheels in the due course of business is twenty per cent. which is so much waste of power. But the extensive breaking of the locomotives and the loss of time in the running of trains, occasioned by the extraordinary slipping are what constitute so great an item to be deducted annually from the profits of the stockholders of railways. The moment the wheels begin to slip, the steam must be shut off instantly by the engine-man, or the crank-pin or parallel rod, the connecting rod or the cross-head will break, and often the axles give way, so that the wheels come off. The repairs that follow these accidents usually cost from $300 to $500. It often happens that one-third of the locomotives are in the shops at one time undergoing repairs, from this cause alone.

Now all these difficulties can be obviated by affixing this apparatus to each locomotive. Besides it renders the train much more safe and less liable to run off the track as the magnetic force tends to keep the locomotive on the rails.

The battery is composed of several cells, each in a portable form with the liquid secured by well adjusted stoppers, is placed in a small box on the front of the engine over the cow catcher quite out of the way of anything else. The helices are placed in iron boxes which are supported by the frame work of the locomotive about three inches above the rail and around the periphery of each driving wheel without touching them. The wheels revolve within. Wires connect the battery with the helices. The whole apparatus when thus annexed is painted and guilded like the locomotive and is ornamental rather than otherwise. It is estimated that the cost of using the battery does not exceed the cost of the sand heretofore required. The improvement is yet in its infancy, but enough has already been seen of its working to warrant the assertion that another great economy has been discovered for the benefit of stockholders in railroads. *

Massachusetts Manufacturing Dividends.

We extract the following interesting business items from the Boston *Commercial Bulletin* of the 18th ult.:—

The Lowell Machine Shop has declared an annual dividend of eight per cent., payable 27th inst. Commenced in 1855—make cotton machinery, locomotives, &c.—capital of $600,000, all paid in—liabilities, March 21st, $223,686.

The James Steam Mills, Newburyport, have declared a semi-annual dividend of five per cent., payable 20th inst. Commenced in 1842—sheetings and shirtings—capital $250,000.

The Globe Steam Mills, Newburyport, have declared a semi-annual dividend of three per cent., payable from 13th inst. Commenced in 1844—make jeans, flannels, printing cloths, &c.—capital, $200,000. At the annual meeting of the stockholders of the corporation, 13th inst., Mr. Alexander D. Brown was elected treasurer in the place of John Porter, Esq., who resigned after a service of 17 years. He leaves a good successor in Mr. Brown, who has been employed at the Bartlett and Globe Mills for 22 years.

The Fibrilia Felting Company, organized under the general laws, have issued their legal notice, from which we condense the following:—This corporation is formed to carry on the business of manufacturing flax, hemp, jute, China grass, silk, wool, cotton, and like fibrous substances in the various forms of manufacture necessary for yarns, cloth and felt as well as the bleaching and coloring the same. The capital stock is $10,000, which has been paid in and has been expended in the purchase of machinery, patent rights, &c., for carrying on the business. The par value of each share is $100, and the business is carried on in

Winchester, Middlesex county. Stephen M. Allen is President, Geo. L. Fall is Treasurer; and they, with S. P. White, are the directors.

The Suffolk Lead Works, South Boston, commenced in 1844—make sugar of lead, chemicals, &c. Their capital is $100,000 paid in, and their total liabilities on 30th ult. were $61,340.

Cotton and the Cotton Manufacture.

(Continued from p. 411.)

The following table shows the quantity of raw cotton exported from the United States since 1791, and the price per pound in cents:

	Quantity. lbs.	Price in cents.	Total value.
1791	189,316	.....	.....
1792	138,328	.....	.....
1793	487,600	.....	.....
1794	1,601,700	.....	.....
1795	6,276,300	.....	.....
1796	6,106,629	.....	.....
1797	3,788,429	.....	.....
1798	9,360,005	.....	.....
1799	9,532,263	.....	.....
1800	17,789,803	.....	.....
1801	20,911,201	.....	.....
1802	27,501,075	.....	.....
1803	41,105,623	18.9	$7,920,000
1804	38,118,041	19.0	7,406,110
1805	40,383,491	23.0	9,445,000
1806	37,491,282	33.2	8,332,000
1807	66,212,737	21.5	14,232,000
1808	12,064,366	18.5	2,221,000
1809	53,210,225	14.1	8,515,000
1810	93,874,201	16.0	15,108,000
1811	62,186,081	15.5	9,652,000
1812	28,952,544	10.6	3,080,000
1813	19,399,911	11.9	2,324,000
1814	17,806,479	14.9	2,683,000
1815	82,998,647	21.1	17,529,000
1816	81,747,116	39.4	24,106,000
1817	85,649,328	23.6	22,628,000
1818	92,471,178	33.8	31,332,000
1819	87,997,045	23.9	21,082,000
1820	127,860,152	17.4	22,309,000
1821	124,893,305	16.2	20,157,484
1822	144,675,095	16.6	24,035,058
1823	173,723,270	11.8	20,445,520
1824	142,369,663	15.4	21,947,401
1825	176,439,907	20.9	36,346,649
1826	204,535,415	17.2	35,025,214
1827	294,310,115	10.0	29,359,545
1828	310,590,463	10.7	22,487,229
1829	264,837,186	10.0	26,574,311
1830	298,459,102	9.9	29,674,883
1831	276,979,784	9.1	25,289,492
1832	322,215,122	9.8	31,724,682
1833	324,698,604	11.1	36,191,102
1834	384,717,907	12.8	49,448,402
1835	387,458,992	18.8	64,961,302
1836	423,571,307	16.8	71,284,925
1837	444,251,537	14.2	63,240,102
1838	592,902,297	10.3	61,556,811
1839	413,674,212	14.8	61,238,982
1840	743,941,061	8.5	63,870,307
1841	530,204,100	10.2	54,330,341
1842	584,717,017	8.1	47,593,464
2843	792,297,106	6.2	49,119,806
1844	663,633,455	8.1	55,063,501
1845	872,896,996	5.92	51,739,643
1846	547,558,055	7.81	42,767,341
1847	527,219,958	13.34	53,415,848
1848	814,274,431	7.61	61,998,294
1849	1,026,602,269	6.4	66,396,967
1850	635,481,604	11.3	71,984,616
1851	927,237,089	12.11	112,315,217
1852	1,093,230,639	8.05	87,965,732
1853	1,111,570,370	9.85	109,456,404
1845	987,833,106	9.47	93,596,220
1855	1,008,424,601	8.74	88,143,844
1856	1,351,431,701	9.49	128,382,351
1857	1,048,282,475	12.55	131,575,859
1858	1,118,624,012	11.80	131,386,661
1859	1,372,755,000	12.12	161,424,923
1860	1,752,087,000	10.85	191,806,558

The following table gives the place of export of cotton, and the quantities and values, for the year ending June 30, 1860:

	Export of cotton in pounds.	Value.
Passamaquoddy	575	$47
Boston	3,102,755	384,940
Genessee	3,130	300
Oswego	11,855	1,435
Niagara	163,900	16,220
Detroit	1,201,204	120,120
New York	97,746,662	12,439,983
Philadelphia	145,993	17,034
Baltimore	100,910	11,944
Richmond	345,691	41,483
Norfolk	126,000	14,483
Petersburg	757,840	82,007
Charleston	157,348,683	19,663,295
Savannah	153,864,457	17,809,127
Mobile	351,540,748	88,533,042
Pensacola	9,000	1,064
Key West	2,338,800	401,919
Apalachicola	2,427,570	271,937
New Orleans	922,748,082	96,166,118
Texas	56,255,306	5,744,981
Salmier	847,773	84,776
Total	1,752,087,640	$191,806,558

Average price per pound 10.85 cents.

The following table shows the official value of cotton goods and yarns exported from the United Kingdom since 1785. Prior to 1800, the table applies only to Great Britain; after that, to all the British Isles:

1785	£864,710	1822	£26,911,041
1786	915,046	1823	26,544,770
1787	1,101,457	1824	30,155,901
1788	1,252,240	1825	29,495,281
1789	1,231,537	1826	25,194,270
1790	1,662,369	1827	33,182,898
1791	1,875,046	1828	33,467,417
1792	2,024,368	1829	37,269,482
1793	1,733,807	1830	41,307,429
1794	2,376,077	1831	39,577,866
1795	2,433,331	1832	43,032,993
1796	3,214,020	1833	46,412,420
1797	2,580,568	1834	51,080,273
1798	3,602,488	1835	52,315,780
1799	5,808,009	1836	58,578,421
1800	5,854,057	1837	51,130,290
1801	7,050,809	1838	64,812,529
1802	7,624,505	1839	67,892,675
1803	7,081,641	1840	73,129,192
1804	8,736,772	1841	69,779,270
1805	9,525,465	1842	68,687,872
1806	10,490,049	1843	82,189,599
1807	10,309,765	1844	91,039,575
1808	12,975,996	1845	93,665,834
1809	19,445,966	1846	93,385,819
1810	18,951,994	1847	82,237,190
1811	12,013,149	1848	93,185,103
1812	16,517,690	1849	112,416,294
1813	*	1850	113,775,380
1814	17,655,378	1851	126,366,489
1815	22,289,645	1852	125,040,858
1816	17,564,461	1853	131,710,646
1817	21,259,224	1854	136,164,974
1818	22,589,130	1855	153,711,478
1819	18,282,292	1856	163,922,118
1820	22,532,079	1857	159,088,484
1821	23,541,615	1858	182,221,181

* Records destroyed by fire.

This *official value* is determined by government rules, established many years since, giving a uniform valuation from year to year at certain fixed rates. This valuation runs ordinarily much above the true market value, but shows with entire accuracy the progress of the cotton manufacture in the British Isles.

The *declared value*, a term often used in the English papers, is the export price returned by the exporter.

In 1850, the import of raw cotton into England was 663,576,861 lbs. valued at £20,239,094. Home consumption, 588,100,020 lbs. valued at £17,937,100. The quantity exported after manufacturing was 401,070,112 lbs., valued at £28,257,401; the home trade took 187,029,888 lbs. valued at £17,569,591—showing a total valuation of £45,826,992 sterling as the amount of the British cotton manufacture in 1850.

In 1859, the gross importation in the official tables is put down at 1,225,989,072 lbs. valued at £34,559,636. The home manufacture took 976,643,000 lbs. valued at £27,530,774. The quantity exported in the form of manufactures was 717,916,867 lbs. valued at £48,208,444 sterling. The home consumption in manufactures was 258,726,133 lbs. valued at £23,164,770 sterling—showing a total valuation of £71,373,214 sterling or $345,446,355 as the products of the cotton manufacture in 1859.

The *official* value of the cotton exports in 1850 is put down at £113,775,380 against £28,257,401 as the computed or invoice valuation. In 1859, the official value is £215,020,993 against £48,208,444 as the declared or invoice price. The discrepancies are explained by the singular methods of valuation still retained in the Custom House system of England.

From the foregoing figures it is fair to infer, that the export price, as given in the invoice of the exporting merchant is rather a fictitious than a true valuation. The 258,726,133 lbs. of cotton goods consumed at home are valued at £23,164,770 or 43.51 cents per lb. The export price of the 717,916,867 lbs. of cotton sent to foreign countries, as appears from the foregoing figures, was only 32.63 cents per lb.

If we analyse more closely the tables and figures above given, we shall be able to arrive at some interesting comparisons as to the advancement of the cotton manufacture in the United States and in the British Isles.

From the above figures it is shown that the price of raw cotton exported from the United States was 12.12 cents per lb. in 1859, and 10.85 cents in 1860. In 1859, its price in England was 13.64 cents, or 1.52 cents per lb. higher than in the United States. Its entire value in the shape of manufactures in 1859 was 35.29 cents. per lb. The cost of manufacture is 21.65 cents per lb. above the market value in England or 23.17 cents per lb. above its cost in the United States. Or in other words, to the cost of cotton in the United States, the English manufacturer adds 23.17 cents to every pound, before it goes into market; or 198 per cent. is added in the form of labor, to its original value.

The cotton consumed, in the British Isles, in 1859, was enhanced by the manufacture from 13.64 cents per lb. to 43.51 cents per lb., or there was added by labor 29.87 cents in value to each pound of cotton, above the cost of the raw material, of their exported cottons. The relative values of the cotton and labor were as 13.64 cents for the cost of cotton to 18.99 per lb. for the labor bestowed in its manufacture.

This would also show, that the average value, or price, of the cotton employed in the manufacture of cotton goods, consumed in the British Isles is 22 per cent. greater than that in those consumed abroad—the proportion being as 61 to 39.

In the United States, the material is more than half the value of the goods when manufactured. In 1850, the cotton manufactures in the United States were valued at $65,501,687. Of this amount $37,778,064 was the cost of cotton, $27,723,623 the value of the labor added. Or stated in relative proportions, 57 per cent. of the value of our cotton goods was, in 1850, raw material, and 43 per cent. the value of the labor bestowed on its manufacture.

These figures show, that English cottons are worth per lb., when manufactured, 212 per cent. more than those produced in the United States, in 1850.

We have no returns of the census of 1860, but we have shown, heretofore, that the quantity of cotton consumed in 1860, was 72 per cent. greater than in 1850, and there cannot have been any considerable advance in the quality of the goods produced in the United States within the last ten years.

The consumption of cotton manufactures in the United States, in 1850, was equal to $2.83 to each inhabitant, including slaves. This is shown by adding to the home production of 1850 .. $65,601,687
Cotton importation 16,409,802

$81,911,489
Deduct cottons exported 15,196,451

Population—23,196,876×$2.83 ..... $66,715,038

The consumption of cotton goods in 1860 is increased to $3.49 to each person as follows:

Production in 1850 ..... $65,501,687
Add 72 per cent. for increase 47,061,214

$112,562,901
Importations in 1860 32,559,644

$145,121,024
Deduct exports in 1860 35,455,644

Pop. in 1860—31,429,896×$3.49 .... $109,666,281

In 1859, the consumption of cotton goods in British Isles was equal to $4.00 to each person estimating the population at 28,150,000 persons as is shown by the foregoing figures. Consumption 258,726,133 lbs.; value $112,580,782 equal to $4.00 each to the population.

(To be continued.)

Illinois Central Railroad.

An election of four directors of the Illinois Central Railroad Company was held at Chicago, on the 31st ult., at which the following gentlemen were chosen: Leroy M. Riley, New York; Franklin Haven, Boston; N. P. Banks, Chicago; John M. Douglas, Chicago. Mr. Douglas is the only new man in the Board.

New York Canals.

The quantity of flour, wheat, corn and barley left at tide water by our State Canals from the commencement of navigation to the 29th of May inclusive, during the years 1860 and 1861, is as follows:

	1861.	1860.	Decrease.
Flour, bbls.	80,600	159,000	73,400
Wheat, bush...	3,043,100	877,200	*2,165,900
Corn, bush.	2,000,200	2,415,000	414,800
Barley, bush. .	84,400	74,400	10,000

* Increase.

By reducing the wheat to flour, the quantity of the latter left at tide-water this year, compared with the corresponding period last year, shows a gain of 354,780 bbls. of flour.

American Steel Cannon.

The vital qualities necessary in cannon metals are *strength* to resist the explosion of the charge, and *hardness* to endure the bounding of the projectile along the bore, and in case of the rifle bore, to resist the excessive wear of the projectile in the grooves. All the metals employed have their defects. Cast iron is quite tenacious, if a sufficient weight is employed, and tolerably hard, but its comparative elasticity, (an important element of strength) is so small that its tenacity is invariably destroyed after a certain number of applications of the straining force. The difficulty of obtaining sound castings, by reason of the unequal shrinkage of the metal, is unfavorable—so much so that the strongest "high" iron, by its superior contraction, does not, as a rule, make so strong a *gun* as a metal in itself weaker. The great weight of cast-iron, for a given strength, has confined its use generally to heavy cannon for siege and sea-coast purposes. Bronze—a more tenacious compound—is prepared for portable guns, and this, in turn, has its serious defects. Its density (an element of strength in cannon metals) and tenacity are considerable, but its softness unfits it, for reasons already stated, for long service, particularly when rifled. And its cost is considerably greater than that of cast or wrought iron, or semi-steel—that is, steel made directly from the pig iron. Wrought iron has a tensile strength double that of the best cast iron, and is much more elastic, but somewhat softer. Authorities generally unite in stating that it was, when most in use, an improvement on cast iron, but the difficulty of producing large masses sound and homogeneous, has prevented its extensive introduction. The celebrated Armstrong gun, and other modern "built-up" cannon are, perhaps, more durable, and certainly stronger than any solid piece can be made, owing to the difficulty of forging or casting large masses of uniform strength, in the present state of the art; but it is generally conceded that the same expense devoted to a large number of cheaper guns will be more effective in the long run.

Steel possesses, in a higher degree than any other compound, the leading qualities required for cannon. It is tenacious, elastic, and hard, in a much greater degree than either of the other materials. There are two principal kinds of steel adapted to making cannon, which indeed vary in value, with reference to the sizes and uses required. Cast-steel is practically homogeneous in small masses, and for this reason is superior for cutlery, the fire-plates of boilers, etc. In the latter case, not strength to resist pressure, but soundness to resist blistering are required. But it can be more soundly worked in very large masses than steel made directly from the pig iron in the puddling furnace, and called semi or puddling steel, while its tensile strength and hardness are little if at all greater. Semi-steel, then, is probably as good a material for guns as cast-steel, instrinsically, while its cost is very much less—about that of wrought iron, and less than that of bronze. In the present state of the art, it is not probable that the largest classes of cannon can be well made *solid* from steel, by reason of the difficulty before mentioned, of making such masses sound. This defect, however, does not apply to light artillery and howitzers. Forgings for such pieces can be made sound enough for all practical purposes. Indeed, the Albany Iron Works'* semi-steel has been invariably proved sound enough in such large forgings as locomotive tyres. The experience with it, under this peculiarly severe test, shows it to wear twice as long as iron, and to wear evenly, and not to fracture under its severe hammering over bad roads, like iron—while the smaller masses, such as boiler-plate, are not so uniformly homogeneous. There seems to be greater facility in making moderately heavy forgings in steel than in wrought iron. Tools for working heavy masses, also, have been greatly improved during the last year or two, and it is probable that all sorts of wrought cannon made by them would be far superior to those made under the light hammers and rolls of the last decade.

The public is aware that this semi or puddled steel, is being made into light guns, in England and Germany; and the question is generally asked, "Why are we not importing such guns?" The question should be: Why are we not developing our own greater resources, and preparing to turn out any quantity of better guns at home, rather than depending for a limited supply from an unfriendly Power?

The Albany Iron Works' steel is, in the first place, made chiefly from Salisbury iron, a more tenacious material than England can produce, as their own authorities concede. The steel, by Government tests, has stood a strain of 107,000 pounds to the square inch, and averages between 90,000 and 100,000, which is higher than the average of the best European puddled steel. The highest test of cast iron, by the way, is 45,000 pounds, and its average is about 25,000; the highest test of wrought iron is about 72,000 pounds, and the highest of bronze, 60,000 pounds. The Albany Iron Works' steel has not only proved more successful here than the English there, but it can be furnished in any quantity, in the shape of guns, to our Government, at a less cost, all things considered, than that of foreign steel. If therefore, there is any virtue in steel cannon, there is every reason why they should be furnished at home. We learn that this steel, already tested and approved by Government for other purposes, will be offered to our military authorities for thorough trial in this department of service. We have no fear as to the result, only let our manufacturers have the chance—the guarantee that their work, if good, will be bought in preference to English work, and we shall be able to cope with any trans-Atlantic Power in the arts of peace, and in the arts of war, if it comes to that. Already the best rifled shells and shot known are produced at home. Artillery, to be effective, must be light; cast-iron is too heavy, bronze is too expensive, and not durable; while steel, at the cost of iron, seems to be the only material upon which we can depend to throw these shells and shot of ours. By all means, let this question be tested at once. The necessity for plenty of artillery is rendered no less imperative by the present aspect of trans-Atlantic matters. Everything may depend on being ready. —*N. Y. Times.*

The Suez Canal.

Letters from Paris state that M. Lesseps, the director of the grand enterprise of opening a ship canal across the Isthmus of Suez, has returned from Egypt to raise additional funds for the prosecution of his great work. According to latest accounts, $4,000,000 have been already expended without adequate results, as a very important dyke, on the Mediterranean side, has been washed away by the action of the waves.

Population of Canada.

The population of Canada in January, 1861, by the new census, as reported in the Quebec *Chronicle*, is as follows:

Lower Canada 1,103,911
Upper Canada 1,369,783
2,473,644

In 1851, the census gave—
Lower Canada 890,261
Upper Cahada 952,004
1,842,265

Increase in 10 years 681,379

Of this increase, 213,650 is in Lower Canada, and 417,729 in Upper Canada. Lower Canada gained at the rate of 22 per cent.; Upper Canada at the rate of 43 per cent. United Canada has gained at the rate of 34 per cent., from 1851 to 1861. This is less than the increase in the United States for the last 10 years, where the ratio of increase from 1850 to 1860 was at the rate of 36.7 per cent., or two per cent. greater than that of Canada.

* Corning, Winslow & Co., Troy, N. Y.

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An *asterick* (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A *dash* (—) signifies "nil." Running *dots* (.....) signify "not ascertained." Land-Grant Railroads are in "*italics*."

Years ending.	Railroad. Main Line.	Lateral and Branch Lines.	2nd Track and Sidings.	Road in progress or projected.	Equipment. Engines.	Cars. Passenger.	Cars. Freight, etc.	Companies.	Abstract of Balance Sheet. Property and Assets. Railroad and Appurtenances.	Rolling-Stock.	Invested in foreign works.	Liabilities. Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Balance. Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings. Gross.	Net.	Dividends.	Price of shares.
	M.	M.	M.	M.	No	No	No.		$	$	$	$	$	$	$	M.	M.	$	$	p. c.	p. c.
								ALABAMA.													
30 Jun. '60	65.0	—	----	50.6	---	---	-----	*Alabama and Florida*	1,451,336	*		877,953	503,500	105,255	1,515,704	54.0	-------	101,102	37,866	—	—
28 Feb. '59	30.3	—	----	58.1	2	2	19	*Alabama and Mississippi*	461,505	30,991	*	335,010	109,500	21,632	518,965	30.3	-------	55,791	31,852	—	—
31 May '60	109.6	—	----	57.8	11	9	102	*Ala. and Tennessee Rivers*	2,261,927	184,906	—	1,067,006	777,777	240,485	2,476,023	109.6	-------	207,626	111,232	—	—
30 Jun. '59	57.0	—	----	171.3	---	---	-----	*Mobile and Girard*	1,500,000	*		-------	-------	-------	-------	57.0	236,791	76,773	21,006	—	—
1 Apr. '60	—	—	—	67.2	---	---	-----	Mobile and Great Northern	84,230	—	—	36,646	79,664	—	116,310	—	—	—	—	—	—
31 Dec. '59	349.9	13.5	----	168.5	25	18	361	*Mobile and Ohio*	7,853,467	862,129	114,894	3,481,791	4,717,497	858,467	12,447,373	328.0	585,543	1,120,588	651,610	—	—
29 Feb. '60	88.5	28.4	----	—	23	14	283	Montgomery and West Point	1,838,718	427,265	100,000	1,419,769	922,622	23,579	2,582,505	116.9	-------	505,156	260,289	6	—
6 Dec. '59	—	—	—	209.5	—	—	—	*North East and South West*	600,000	*		650,000	-------	-------	1,030,957	—	—	—	—	—	—
								ARKANSAS.													
-- -- --	—	—	—	301.4	—	—	—	Cairo and Fulton	-------	-------		-------	-------	-------	-------	—	—	—	—	—	—
30 Nov. '58	38.5	—	----	107.5	---	---	-----	Memphis and Little Rock	553,877	*		351,524	446,000	10,725	811,949	—	—	—	—	—	—
								CALIFORNIA.													
30 Dec. '60	22.5	—	----	—	---	---	-----	Sacramento Valley	1,493,850	*		793 850	700,000	—	1,493,850	22.5	-------	230,251	104,594	—	—
								CONNECTICUT.													
1 Aug. '59	23.9	—	1.9	—	3	4	34	Danbury and Norwalk	335,842	50,873	—	279,100	85,000	4,600	408,597	23.9	-------	73,826	27,992	6	—
30 Sep. '59	122.4	—	10.8	75.1	16	20	250	Hartford, Provid. and Fishkill	3,903,455	302,511	—	1,936,739	1,810.500	319,444	4,323,922	122.4	-------	333,500	152,777	—	—
31 Aug. '59	61.4	10.6	64.5	—	18	21	302	Hartford and New Haven	3,170,747	254,000	102,888	2,350,000	964,000	16,463	3,932,432	72.4	-------	844,772	502,579	10	140
31 Dec. '60	74.0	—	----	—	11	11	240	Housatonic	2,439,775	*	6,247	2,000,000	197,000	52,461	2,585,534	120.0	-------	319,106	77,038	—	—
31 Dec. '59	57.0	—	2.3	—	7	11	182	Naugatuck	1,370,958	207,343	7,000	1,031,800	287,350	29,041	1,695,018	62.0	-------	241,330	127,505	3	—
31 Dec. '59	61.0	—	3.0	—	---	---	-----	N. Haven, N. London and Ston.	1,851,879	*		960,748	866,000	200,000	-------	61.0	-------	107,837	20,627	—	—
31 Dec. '59	46.0	9.0	7.0	—	---	---	-----	New Haven and Northampton	1,400,000	—	—	922,500	700,000	—	-------	59.7	-------	90,362	90,362	5	—
31 Oct. '59	66.0	—	5.0	—	7	5	106	New London Northern	1,566,695	*		510,900	1,052,500	3,872	1,576,147	66.0	-------	119,146	—	—	—
30 Sep. '60	61.3	1.0	63.8	—	29	72	368	New York and New Haven	5,330,486	*		3,000,000	2,104,000	19,889	-------	117.4	-------	1,049,768	416,251	—	—
30 Nov. '60	66.0	—	8.5	—	14	17	282	Norwich and Worcester	2,463,983	237,171	200,000	2,122,500	811,300	45,286	-------	66.0	-------	358,362	159,005	3½	40
								DELAWARE.													
31 Oct. '59	84.0	—	10.0	—	—	—	—	Delaware	1,547,825	*	—	361,478	931,500	112,029	1,547,825	84.0	-------	—	75,672	—	—
31 Oct. '59	16.2	—	----	—	—	—	—	Newcastle and Frenchtown	723,551	—	—	744,520	—	4,641	749,171	5.0	-------	21,195	—	6	—
								FLORIDA.													
-- -- '59	154.2	—	—	—	—	—	—	*Florida*	-------	-------		-------	-------	-------	-------	—	—	—	—	—	—
30 Apr. '60	32.0	—	3.0	13.0	3	1	6	*Florida and Alabama*	532,791	30,586	—	191,485	195,000	75,894	619,112	32.0	-------	7,857	3,535	—	—
30 Jun. '59	31.3	—	2.0	28.6	2	1	24	*Flo., Atlantic and Gulf Central*	396,310	28,608	—	205,781	204,600	164,670	594,836	19.3	-------	10,255	1,504	—	—
-- -- '59	26.5	3.9	----	227.0	---	---	-----	*Pensacola and Georgia*	-------	-------		-------	-------	-------	-------	29.4	-------	-------	-------	—	—
								GEORGIA.													
30 Jun. '60	86.7	—	----	—	16	7	124	Atlanta and West Point	1,192,389	*	—	1,250,000	126,000	—	1,597,385	86.7	-------	418,036	265,827	8	125
-- -- '59	30.0	—	----	133.5	—	—	—	Atlantic and Gulf—M. Trunk	-------	-------		-------	-------	-------	-------	30.0	-------	-------	-------	—	—
31 Dec. '60	53.0	—	----	—	---	---	-----	Augusta and Savannah	1,032,200	*	—	733,700	129,500	—	-------	53.0	-------	168,988	95,612	—	—
30 Apr. '59	43.5	—	----	23.7	---	---	-----	Brunswick and Florida	755,000	*	—	151,887	-------	-------	-------	31.0	-------	-------	-------	—	—
30 Nov. '60	191.0	—	----	—	53	62	697	Central of Georgia (and Bank)	4,366,800	*	—	4,366,800	-------	-------	6,590,173	229.0	879,468	1,715,025	764,574	10	—
31 Mar. '60	171.0	61.0	----	—	---	---	-----	Georgia (and Bank)	4,156,000	*	1,003,650	4,156,000	312,500	-------	8,123,343	232.0	-------	1,159,188	528,043	8	100
30 Nov. '60	102.5	—	----	—	19	16	171	Macon and Western	1,500,000	*	—	1,500,000	-------	12,295	1,658,976	102.5	226,241	404 618	212,676	19	90
31 July '59	50.0	—	----	—	7	2	107	Muscogee	774,244	162,534	—	669,950	249,000	-------	1,026,868	50.0	-------	202,714	110,516	8	—
1 May, '58	68.1	—	----	—	3	4	33	Savannah, Albany and Gulf	1,386,634	52,373	—	1,275,901	10,200	180,621	1,473,140	71.6	-------	-------	-------	—	—
31 July '60	106.1	100.8	16.2	—	18	22	201	South Western	3,770,425	*	—	2,921,900	396,500	19,913	3,822,913	228.8	-------	-------	383,353	13	—
30 Sep. '59	138.0	—	----	—	52	24	705	Western and Atlantic	5,901,497	*	—	built and	own'd by	State.	-------	138.0	-------	832,343	454,541	—	—
								ILLINOIS.													
31 Dec. '60	220.0	—	----	—	38	36	647	Chicago, Alton and St. Louis	10,000,000	-------	-------	3,500,000	4,500,000	-------	10,000,000	220.0	845,981	994,569	225,786	13m	—
30 Apr. '60	138.0	—	26.0	—	62	31	990	Chic., Burlington and Quincy	6,067,928	1,400,998	711,359	4,631,540	3,158,000	179,060	8,701,823	210.0	-------	1,233,708	453,141	—	55
31 Dec. '58	45.0	—	----	—	6	14	101	Chicago and Milwaukee	1,799,894	67,869	120,000	988,000	762,865	188,085	2,050,065	45.0	14 mo.	243,282	135,284	—	—
1 Apr. '60	194.0	—	----	—	---	---	-----	Chicago and Northwestern	9.344,863	-------	-------	2,000,000	7,369,034	75,829	9,344,863	194.0	10 mo.	384,656	139,822	—	—
Jun. '60	181.8	—	----	—	58	57	960	Chicago and Rock Island	6,913,554	*	115,285	5,603,000	1,397,000	—	7,473,049	228.4	-------	1,093,934	309,567	3½	33½
10 Nov. '58	33.2	—	----	—	---	---	-----	Fox River Valley	580,000	*	—	-------	580,000	-------	-------	84.0	-------	-------	-------	—	—
31 Dec. '60	121.0	138.5	74.5	—	66	63	1,369	Galena and Chicago Union	8,040,565	1,311,916	319,903	6,028,300	3,524,200	-------	10,469,355	261.3	792,029	1,462,752	652,260	—	57½
-- -- '57	175.0	—	----	—	---	---	-----	Great Western	5,022,926	*	—	1,600,000	3,088,426	334,500	5,022,926	175.0	-------	-------	-------	—	—
31 Dec. '60	454.8	252.5	----	—	113	96	2,305	*Illinois Central*	27,196,391	*	—	15,654,980	15,672,240	—	33,221,720	708.3	-------	2,721,591	850,630	—	66
-- -- --	—	—	—	81.5	—	—	—	Illinois River	-------	-------		-------	-------	-------	-------	—	—	—	—	—	—
-- -- --	148.0	—	----	—	---	---	-----	Ohio and Mississippi	4,870,586	*	—	1,780,295	3,292,403	-------	-------	148.0	-------	-------	-------	—	—
-- -- --	46.6	—	----	—	---	---	-----	Peoria and Bureau Valley	-------	-------		-------	600,000	-------	-------	oper	by Chic.	& R. Is.	125,000	—	—
-- -- --	—	—	—	129.0	—	—	—	Peoria and Hannibal	-------	-------		-------	-------	-------	-------	—	—	—	—	—	—
-- -- '58	186.0	—	----	—	---	---	-----	Peoria and Oquawka	5,400,000	*	—	1,569,889	2,200,000	-------	-------	186.0	-------	-------	-------	—	—
31 Dec. '58	100.0	—	----	—	---	---	-----	Quincy and Chicago	1,978,555	*	—	800,000	1,200,000	—	2,000,000	100.0	oper.by	Bur. &	Quincy.	—	—
-- -- --	1.0	—	----	—	---	---	-----	Rock Island Bridge	-------	-------		-------	-------	-------	-------	oper	by Chic.	& R. Is.		—	—
31 Dec. '58	168.5	39.8	12.2	—	31	30	424	Terre Haute, Alton & St. Louis	7,608,958	625,487	—	3,026,903	5,035,615	741,040	8,866,252	208.3	-------	823,767	-------	—	—
								INDIANA.													
-- -- --	108.0	—	----	—	---	---	-----	Cincinnati and Chicago	2,080,433	*	-------	1,196,679	1,006,125	-------	-------	108.0	-------	-------	-------	—	—
-- -- --	29.0	—	----	73.0	---	---	-----	Cincinnati, Peru and Chicago	-------	-------		-------	-------	-------	-------	29.0	-------	-------	-------	—	—
31 Aug. '57	109.0	—	----	—	---	---	-----	Evansville and Crawfordsville	2,233,413	*	2,750	986,061	1,219,100	51,772	2,283,748	109.0	-------	249,867	119,432	—	—
1 Jan. '58	72.4	—	----	—	19	21	278	Indiana Central	1,666,280	244,081	25,641	611,050	1,166,000	47,850	2,111,059	109.0	-------	368,189	132,094	6	58
31 Dec. '58	89.8	20.2	----	—	23	19	313	Indianapolis and Cincinnati	2,497,952	540,043	25,689	1,689,900	1,362,284	140,689	3,458,108	110.0	-------	448,858	230,834	9	42
31 Mar. '60	84.0	—	----	—	---	---	-----	Ind., Pittsburg and Cleveland	1,902,693	*	10,000	835,971	1,025,700	48,673	2,272,357	84 0	-------	236,397	80,109	—	—
31 Aug. '57	78.0	—	----	—	---	---	-----	Jeffersonville	1,339,576	*	—	1,014,252	681,000	99,400	-------	108.0	-------	222,737	74,328	—	—
-- -- '59	64.0	—	----	—	---	---	-----	Lafayette and Indianapolis	1,850,000	*	—	1,000,000	600,000	-------	2,000,000	64.0	-------	-------	-------	—	—
31 Dec. '60	86.0	49.0	----	—	23	---	-----	Madison and Indianapolis	2,667,704	*	356,755	1,648,050	1,285,300	87,969	3,060,128	135.0	201,402	230,563	99,080	—	—
-- -- '58	288.0	—	----	—	---	---	-----	Louisv., N. Albany & Chicago	6,000,000	*	*	2,800,000	3,000,000	2,000,000	6,000,000	288.0	-------	645,827	371,402	—	—
-- -- '58	74.0	—	----	—	---	---	-----	Peru and Indianapolis	2,000,000	*	*	1,100,000	820,000	80,000	2,000,000	74.0	-------	-------	-------	—	—
30 Nov. '60	73.0	—	----	—	18	25	298	Terre Haute and Richmond	1,611,450	*	120,570	1,381,450	230,000	46,647	1,970,381	73.0	-------	404,599	232,773	10	—
								IOWA.													
1 Jan. '58	75.5	—	----	201.5	---	---	-----	*Burlington and Missouri*	1,514,257	*	—	752,733	665,000	92,663	1,542,768	50.0	-------	-------	-------	—	—
31 Dec. '59	86.0	—	----	—	---	---	-----	Chicago, Iowa and Nebraska	1,350,000	*	—	516,072	860,000	369,084	-------	86.0	7 mo's.	85,329	46,771	—	—
31 May, '58	50.1	—	----	269.0	8	8	86	Dubuque and Pacific	1,579,988	166,823	—	838,086	965,000	441,787	2,267,313	50.1	-------	-------	-------	—	—
-- -- --	—	—	—	438.0	—	—	—	Iowa Central Air Line	-------	-------		245,000	755,000	-------	-------	—	—	—	—	—	—
1 Jun. '58	38.5	—	----	101.3	4	4	64	Keok., Ft. Desmoines & Minn.	1,037,876	82,499	—	921,449	570,000	-------	-------	38.5	11 mo's.	458,821	21,356	—	—
1 Jun. '58	11.2	—	----	57.3	---	---	-----	Keok., Mt. Pleasant and Musc.	745,703	*	—	548,216	414,000	60,452	1,022,668	11.2	-------	-------	-------	—	—
-- -- '59	55.0	52.6	----	312.0	---	---	-----	Mississippi and Missouri	4,198,000	*	—	-------	-------	-------	-------	107.6	-------	-------	-------	—	—
								KENTUCKY.													
31 Oct. '59	80.0	—	----	—	---	---	-----	Covington and Lexington	3,743,971	276,024	—	1,582,169	2,930,000	337,532	4,375,993	111.8	-------	426,408	227,534	—	85
30 Jun. '57	20.0	—	----	113.0	---	---	-----	Lexington and Big Sandy	694,024	*	—	sold, 1859,	for $26,0	00.	-------	20.0	-------	-------	-------	—	—
-- -- '58	13.0	—	----	22.0	---	---	-----	Lexington and Danville	765,500	—	—	694,444	71,000	-------	-------	13.0	oper.by	Cov. &	Lex.	—	—
30 Jun. '60	29.0	—	----	—	—	—	—	Lexington and Frankfort	590,401	52,300	—	514,409	130,000	—	724,865	29.0	-------	120,324	54,274	7	80
30 Jun. '60	65.1	—	----	—	12	10	165	Louisville and Frankfort	1,375,359	126,735	6,540	741,069	456,519	—	1,662,740	65.0	-------	270,053	124,869	—	66
1 Oct. '60	185.0	84.0	16.9	—	30	20	455	Louisville and Nashville	8,530,718	*	—	5,538,481	3,255,500	661,269	9,455,250	269.0	613,803	716,478	371,122	—	—
-- '59	18.8	—	----	70.2	—	—	—	Maysville and Lexington	-------	-------		-------	-------	-------	-------	18.8	oper.by	Cov. &	Lex.	—	—
								LOUISIANA.													
-- -- --	22.0	—	----	—	---	---	-----	Clinton and Port Hudson	750,666	*	—	-------	-------	-------	-------	22.0	-------	-------	-------	—	—
-- -- --	27.0	—	----	—	---	---	-----	Mexican Gulf	662,911	*	—	-------	-------	-------	-------	27.0	-------	-------	-------	—	—
31 Dec. '60	80.0	—	----	178.0	12	12	216	*N. O. Opelousas and Gr. West'n*	3,954,420	505,260	—	3,242,318	566,000	339,297	5,855,320	80.0	180,204	481,922	223,649	—	—
31 Mar. '59	206.0	—	----	205.0	30	19	364	*N. O. Jackson and Gr. Northern*	5,639,562	613,613	—	4,437,990	2,817,000	188,685	9,147,852	206.0	-------	753,774	-------	—	—
31 Aug. '60	58.7	—	----	135.3	---	---	-----	*Vicksburg, Shreveport & Texas*	1,662,691	*	—	1,283,014	245,969	108,434	1,710,81[illegible]	83.7	-------	-------	-------	—	—

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An *asterick* (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A *dash* (—) signifies "nil." Running *dots* (.....) signify "not ascertained." Land-Grant Railroads are in "*italics*."

Years ending.	Railroad. Main Line.	Lateral and Branch Lines.	2nd Track and Sidings.	Road in progress or projected.	Equipment. Engines.	Cars. Passenger.	Cars. Freight, etc.	Companies.	Abstract of Balance Sheet. Property and Assets. Railroad and Appurtenances.	Rolling-Stock.	Invested in foreign works.	Liabilities. Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Balance. Total, incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings. Gross.	Net.	Dividends.	Price of shares
	M.	M.	M.	M.	No	No	No.		$	$	$	$	$	$	$	M.	M.	$	$	p. c.	p. c.
								MAINE.													
30 Nov. '59	36.5	—	.....	—	4	4	21	Androscoggin	757,381	*		151,833	444,638	160,910	757,381	36.5	.....	40,155	24,676	—	.....
31 May, '59	55.0	—	.....	—	9	10	128	Androscoggin and Kennebec	2,210,947	*	27,925	457,900	1,748,457	101,209	2,307,566	137.0	73,186	281,929	89,766	—	.....
30 Jun. '59	149.0	—	25.0	—	41	17	349	Atlantic and St. Lawrence	6,066,375	857,566		2,494,900	3,472,000	9,572	5,976,472	149.0	429,791	545,741	150,226	6	.....
30 Jun. '59	12.5	—	2.0	—	4	3	45	Bangor, Oldtown and Milford	244,726	*		135,000		40,576	244,726	12.5	.....	30,830	Loss.	—	.....
31 Aug. '59	63.0	9.5	8.0	—	12	11	120	Kennebec and Portland	2,871,264	*		1,287,779	1,280,000	271,143	2,990,998	72.5	.....	164,516	81,695	—	.....
31 Dec. '59	—	—	—	14.0	—	—	—	Penobscot	328,412	—		180,497	300,000	75,000	—	—	—	—	—	—	.....
31 May, '59	54.7	—	.....	—	4	10	93	Penobscot and Kennebec	1,611,413	104,019	78,014	555,228	1,206,800	128,576	1,890,604	54.7	oper. by	An.&K.	67,324	—	.....
31 May, '59	51.3	—	.....	—	11	13	118	Portland, Saco and Portsmouth	1,494,792	*	5,208	1,500,000			1,500,000	51.3	141,664	208,299	104,029	6	100
31 May, '59	37.0	—	.....	—	—	—	—	Somerset and Kennebec	783,763	*		169,200	556,600	—	—	37.0	.....	55,403	28,404	—	.....
31 May, '59	18.5	—	.....	33.5	—	—	—	York and Cumberland	1,090,000	*		370,000	450,000	270,000	1,090,000	18.5	.....	—	—	—	.....
								MARYLAND.													
30 Sep. '60	279.6	7.2	.....	—	235	124	3,272	Baltimore and Ohio	21,314,042	3,604,731	3,579,907	13,118,902	10,781,833	566,070	31,241,011	286.8	.....	3,922,203	2,305,788	6	35
30 Sep. '60	30.0	—	.....	—	7	33	167	Washington Branch	1,650,000	*		1,650,000			1,824,806	39.0	187,427	462,880	290,840	9	100
31 Dec. '60	138.0	4.0	16.4	—	41	31	1,723	Northern Central	7,553,616	855,889	214,998	2,260,000	5,890,300	537,926	9,041,851	218.0	.....	1,018,103	283,627	—	12½
								MASSACHUSETTS.													
30 Nov. '60	21.2	—	2.0	—	6	4	80	Berkshire	500,560	100,000		600,000			601,360	ope	rat. by	Housat.	42,000	7	.....
30 Nov. '60	26.8	1.8	43.6	—	21	26	566	Boston and Lowell	2,245,728	*		1,830,000	440,000	3,863	2,655,821	28.6	.....	544,882	184,615	8	98
31 May, '60	74.3	6.8	51.3	—	32	54	606	Boston and Maine	3,846,709	417,233	465,758	4,076,974		134,950	4,929,166	118.3	553,484	915,626	450,096	8	107
30 Nov. '60	47.0	7.0	22.3	—	22	27	210	Boston and Providence	3,057,900	102,100		3,160,000	162,720	46,647	3,717,704	54.0	.....	685,631	349,487	8	107
30 Nov. '60	44.6	24.0	59.2	—	30	59	295	Boston and Worcester	4,301,025	437,416	100,000	4,500,000		47,580	5,327,567	83.7	525,954	1,045,683	439,284	8	108
30 Nov. '60	46.1	1.1	2.7	—	7	10	109	Cape Cod Branch	907,761	123,864		681,690	168,400	11,058	—	47.2	77,522	122,637	45,613	—	124
30 Nov. '60	50.0	2.4	8.9	—	12	13	331	Connecticut River	1,614,385	187,558		1,591,100	242,000	—	1,928,264	52.4	.....	297,096	153,154	8	85
30 Nov. '60	44.1	30.5	24.4	—	56	47	429	Eastern	4,450,417	*		2,853,400	1,955,500	—	—	120.7	.....	719,234	367,083	2	64
30 Nov. '60	19.9	1.3	3.6	—	—	—	—	Essex	742,592	4,416		299,107	280,261	197,428	776,796	.....	55 946	62,498	12,498	—	67
30 Nov. '60	50.9	16.8	70.9	—	29	28	655	Fitchburg	3,190,851	350,149		3,540,000	100,000	—	3,869,729	67.7	337,451	632,865	272,299	6	96
30 Nov. '60	14.0	2.4	—	—	3	3	37	Fitchburg and Worcester	293,658	40,226		214,296	62,900	300	333,884	26.4	37,245	52,971	23,837	6	98½
30 Nov. '60	24.9	—	2.0	—	—	—	—	Hampshire and Hampden	577,582	—		298,951	303,014	57,065	653,030	ope	r. by N.	H.&N'h	28,791	—	.....
30 Nov. '60	12.4	—	2.3	—	2	3	27	Lowell and Lawrence	332,883	30,275		200,000	100,000	—	363,158	ope	r. by B.	and L'll	12,550	6	.....
30 Nov. '60	14.6	—	17.1	—	12	12	324	Nashua and Lowell	558,920	95,683		600,000			698,563	30.0	172,511	251,683	72,097	8	112
30 Nov. '60	20.2	1.6	1.0	—	7	16	146	New Bedford and Taunton	494,843	52,644		500,000		19,800	564,707	21.8	49,241	136,565	30,677	5	.....
30 Nov. '60	26.9	—	2.3	—	5	9	44	Newburyport	596,208	63,696		220,240	221,600	211,693	653,533	36.0	75,866	16,577	2,552	—	.....
30 Nov. '60	8.6	—	.....	23.4	—	—	—	N. York and Boston Air Line	673,302	—		379,818	197,513	111,691	—	8.4	24,428	15,891	—	—	.....
30 Nov. '60	79.5	7.8	25.6	—	27	46	358	Old Colony and Fall River	3,434,164	*		3,015,100	107,000	76,500	—	87.3	413,017	642,406	316,185	6	103½
30 Nov. '60	18.6	—	0.7	—	1	2	1	Pittsfield and North Adams	432,430	11,247		450,000			450,000	18.6	33,160	48,169	26,769	6	.....
30 Nov. '60	43.4	1.0	14.9	—	12	18	308	Providence and Worcester	1,442,470	254,565	39,800	1,600,000	200,000	—	1,864,789	44.4	.....	393,589	197,774	8	106
30 Nov. '60	16.9	—	1.7	—	3	3	1	Salem and Lowell	366,987	82,543		243,305	226,900	316	470,521	ope	r. by B.	and L'll	17,508	1	.....
30 Nov. '60	11.5	—	0.4	—	2	7	17	South Shore	462,167	39,426		259,685	150,000	2,391	513,112	11.5	23,529	59,370	16,711	—	97
30 Nov. '60	21.9	—	1.0	—	—	—	—	Stockbridge and Pittsfield	448,700	—		448,700			451,000	ope	r. by Ho	usaton.	31,409	7	.....
30 Nov. '60	11.1	0.6	1.3	—	7	18	144	Taunton Branch	250,000	*		250,000			250,000	.....	50,082	156,015	27,817	8	.....
30 Nov. '60	6.1	—	.....	36.5	—	—	—	Troy and Greenfield	478,048	—		385,206	219,000	9,854	614,060	ope	r. by T.	and B.	5,333	—	.....
30 Nov. '60	69.0	8.0	5.5	—	11	8	192	Vermont and Massachusetts	3,309,622	207,343		2,214,225	1,003,880	—	3,516,865	77.0	101,326	211,899	75,810	—	11
30 Nov. '60	156.1	17.3	106.8	—	72	59	1,183	Western (incl. Alb.&W.S. etc.)	9,933.396	1,095,713	15,120	5,150,000	7,269,520	17,532	13,940,644	192.0	.....	1,881,351	888,254	—	111
30 Nov. '60	45.1	—	9.3	—	10	8	149	Worcester and Nashua	1,187,935	140,962		1,141,000	150,000	975	1,403,409	45.7	180,153	229,332	102,604	6	62
								MICHIGAN.													
1 Jun. '59	17.3	—	.....	2.7	2	1	100	*Bay de Noquet and Marquette*	.....	.....		.....	.....	.....	.....	.....	.....	.....	.....	—	.....
30 Sep. '59	57.0	—	.....	—	—	—	—	Chic. Detroit & Can.G.T.Junc.	built and	equipp	ed by G	r. Tr'k R.	R. Co. of	Canada	—	—	—	—	—	—	.....
30 Sep. '60	188.0	—	.....	—	—	—	—	*Detroit and Milwaukee*	8,270,623	647,596		2,950,000	4,250,000	.....	9,008,369	188.0	.....	365,038	144,270	—	.....
-- -- --	—	—	—	—	—	—	—	*Flint and Pere Marquette*	.....	.....		.....	.....	.....	.....	.....	.....	.....	.....	—	.....
-- -- --	—	—	—	183.0	—	—	—	*Grand Rapids and Indiana*	.....	.....		.....	.....	.....	.....	.....	.....	.....	.....	—	.....
31 May, '59	284.0	—	.....	—	98	123	1,528	Michigan Central	12,847,238	*	1,149,069	6,057,840	8,284,063	119,089	14,548,411	329.0	.....	2,417,915	886,697	—	11½
31 Mar. '61	246.0	293.0	.....	—	83	102	971	Mich. S'th'n & N'th'n Indiana	13,601,120	1,637,259	2,352,574	9,018,200	9,719,704	437,886	19,175,790	539.0	1,592,377	2,075,459	1,035,629	—	11½
-- -- '59	—	—	—	89.8	—	—	—	*Port Huron and Milwaukee*	.....	.....		.....	.....	.....	.....	.....	.....	.....	.....	—	.....
								MINNESOTA.													
-- -- '59	—	—	—	620.0	—	—	—	*Minnesota and Pacific*	.....	.....		.....	600,000	.....	.....	.....	.....	.....	.....	—	.....
-- -- '59	—	—	—	175.0	—	—	—	*Southern Minnesota*	.....	.....		.....	575,000	.....	.....	.....	.....	.....	.....	—	.....
-- -- '59	—	—	—	112.5	—	—	—	*Minneapolis and Cedar Rapids*	.....	.....		.....	600,000	191,130	.....	.....	.....	.....	.....	—	.....
-- -- '59	—	—	—	200.0	—	—	—	*Minnesota Transit*	.....	.....		.....	500,000	.....	.....	.....	.....	.....	.....	—	.....
-- -- '59	—	—	—	60.0	—	—	—	*Root River Valley*	.....	.....		.....	.....	.....	.....	.....	.....	.....	.....	—	.....
								MISSISSIPPI.													
30 Apr. '60	236.0	—	.....	—	25	22	336	*Mississippi Central*	4,966,022	756,292	—	2,000,961	2,554,732	895,992	6,331,899	236,0	.....	584,342	328,092	—	.....
1 Oct. '59	71.4	—	.....	27.8	7	4	41	*Mississippi and Tennessee*	1,254,894	159,018	—	798,285	456,949	275,060	1,974,444	59.7	.....	176,462	116,433	—	.....
31 Dec. '58	98.2	—	.....	60.4	—	—	—	*Southern Mississippi*	2,750,000	*	—	1,000,000	1,400,000	—	—	83.2	.....	250,047	121,659	—	.....
								MISSOURI.													
30 Nov. '58	12.0	—	.....	65.8	1	—	.....	*Cairo and Fulton*	281,645	9,200	—	50,493	327,000	50,892	128,386	12.0	—	—	—	—	.....
31 Aug. '60	206.8	—	.....	—	—	—	—	*Hannibal and St. Joseph*	12,364,134	*	—	1,782,886	10,571,000	156,643	12,510,529	206.8	14 mo's.	961,856	487,333	—	.....
31 Jan. '61	168.8	—	16.8	68.0	22	19	391	*North Missouri*	6,469,890	496,254	—	2,594,100	4,350,000	96,429	7,236,452	168.0	10 mo's.	292,428	78,975	—	.....
-- -- --	—	—	—	—	—	—	—	*Platte County*	.....	.....	—	.....	.....	.....	.....	.....	.....	.....	.....	—	.....
28 Feb. '59	163.0	19.0	.....	119.0	26	26	412	*Pacific*	8,621,659	614,782	—	3,330,657	8,203,000	754,837	12,288,494	182.0	.....	676,310	301,503	—	.....
31 Oct. '58	19.0	—	.....	264.0	—	—	—	*South-Western Branch*	1,226,010	—	—	66,974	1,400,000	—	—	—	—	—	—	—	.....
30 Sep. '60	86.5	3.6	.....	—	16	13	222	*St. Louis and Iron Mountain*	5,179,580	340,369	75,000	1,970,537	3,501,000	43,989	5,837,911	90.1	343,827	235,291	59,438	—	.....
								NEW HAMPSHIRE.													
31 Mar. '59	23.1	—	3.2	—	—	—	—	Ashuelot	506,000	—	—	246,018	150,000	109,982	506,000	ope	r. by Con	n. River	30,000	—	.....
31 Mar. '59	93.5	—	5.6	—	14	10	232	Boston, Concord and Montreal	2,580,134	283,450	8,219	1,800,000	1,050,000	165,883	3,015,880	93.5	353,000	227,720	86,338	—	8
30 Nov. '59	53.6	—	8.0	—	18	11	289	Cheshire	2,753,697	322,267	—	2,085,925	738,200	84,327	3,163,731	63.6	.....	327,741	125,159	—	10
30 Nov. '59	28.1	—	2.5	—	4	4	26	Cocheco	825,200	*	—	389,047	420,353	13,070	858,264	28.1	.....	51,698	21,866	—	.....
31 Mar. '59	34.5	—	44.0	—	21	22	494	Concord	1,500,000	*	—	1,500,000			1,564,506	61.3	334,532	459,659	128,366	8	59
30 Sep. '59	46.8	—	.....	—	—	—	—	Concord and Portsmouth	250,000	*	—	250,000			250,000	ope	r. by Con	cord.	15,000	—	70
31 Mar. '59	14.6	—	.....	—	—	—	—	Contoocook River	200,000	—	—	200,000			200,000	14.6	4,182	16,603	1,528	—	.....
30 Nov. '59	16.5	—	.....	—	—	—	—	Eastern	525,205	—	—	492,500	—	42,795	525,205	ope	r. by Eas	tern Ma	ss.	—	64
31 Mar. '59	20.5	—	.....	25.8	3	2	27	Great Falls and Conway	433,404	40,887	—	166,748	209,927	42,219	477,476	20.5	30,960	24,027	12,450	—	.....
31 Mar. '59	26.8	—	.....	—	—	—	—	Manchester and Lawrence	1,000,000	—	—	863,400	33,800	108,259	1,005,459	ope	r. by Con	cord.	88,577	8	101
31 Mar. '59	52.7	—	4.0	—	2	4	80	Merrimac and Conn. Rivers	1,109,860	138,715	—	595,587	383,400	303,517	1,282,504	52.7	.....	59,774	21,156	—	.....
31 Mar. '59	69.2	12.8	10.4	—	22	13	372	Northern New Hampshire	3,343,167	*	33,750	3,068,400	299,500	25,800	3,393,900	82.0	268,657	353,101	187,136	4	47½
30 Apr. '59	24.7	—	2.2	—	5	2	50	Sullivan	847,032	78,832	—	500,000	750,000	262,516	1,512,416	24.7	49,000	63,874	19,897	—	.....
								NEW JERSEY.													
30 Nov. '59	64.2	—	.....	—	—	—	—	Belvidere Delaware	3,192,269	*	—	997,700	2,049,500	188,888	—	76.0	.....	269,605	127,241	—	.....
30 Nov. '59	63.9	32.3	.....	8.0	—	—	—	Camden and Amboy	5,709,637	*	3,923,394	3,798,400	6,882,000	—	—	96.2	.....	2,378,392	1,189,399	12	116
30 Nov. '59	60.2	—	.....	—	—	—	—	Camden and Atlantic	1,798,141	*	—	657,351	1,006,800	435,655	—	60.2	.....	152,155	66,453	—	.....
31 Dec. '60	64.0	—	.....	—	30	21	256	Central of New Jersey	5,042,163	424,700	—	2,200,000	3,186,000	175,000	5,580,981	64.0	488,871	1,185,847	710,396	10	102½
1 Mar. '60	—	—	.....	2.9	—	—	—	Long Dock	800,000	126,000	—	—	1,488,121	—	—	—	—	—	—	—	.....
31 Dec. '59	53.0	—	.....	45.5	11	15	91	Morris and Essex	1,622,556	*	55,000	1,157,800	340,000	1,766,235	1,760,562	53.0	.....	255,236	107,321	6½	.....
31 Dec. '60	33.8	—	.....	—	—	—	—	New Jersey	3,589,031	394,228	1,266,337	3,749,000	688,000	—	5,312,019	33.8	522,731	1,113,882	670,720	10	114
30 Nov. '59	21.3	—	.....	—	2	6	17	Northern New Jersey	365,344	*	—	154,157	—	—	—	—	—	—	—	—	.....
30 Sep. '59	13.5	—	.....	—	—	—	—	Paterson and Hudson	630,000	*	—	630,000	—	—	630,000	ope	r. by N.	Y. & E.	53,400	8	.....
30 Sep. '59	15.0	—	.....	—	—	—	—	Paterson and Ramapo	350,000	*	—	248,225	95,000	257	350,000	ope	r. by N.	Y. & E.	24,440	—	.....
3 Nov. '59	18.7	—	.....	—	—	—	—	Warren	1,625,312	*	—	1,024,600	600,000	713	1,625,312	18.7	6 mo.	210,685	94,809	5¼	.....
30 Nov. '59	13.0	—	.....	47.0	—	—	—	West Jersey	280,278	—	—	216,794	—	56,582	—	—	—	15 344	3,368	—	.....

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An *asterick* (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A *dash* (—) signifies "nil. Running *dots* (.....) signify "not ascertained." Land-Grant Railroads are in "*italics*."

Years ending.	Railroad. Main Line.	Railroad. Lateral and Branch Lines.	Railroad. 2nd Track and Sidings.	Road in progress or projected.	Equipment. Engines.	Equipment. Cars. Passenger.	Equipment. Cars. Freight, etc.	Companies.	Abstract of Balance Sheet. Property and Assets. Railroad and Appurtenances.	Property and Assets. Rolling-Stock.	Property and Assets. Invested in foreign works.	Liabilities. Share Capital paid in.	Liabilities. Bonded and Mortgage Debt.	Liabilities. Floating Debt.	Liabilities. Total, Balance incl. all other assets and liabilities.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings. Gross.	Earnings. Net.	Dividends.	Price of shares.
	M.	M.	M.	M.	No	No	No.		$	$		$	$	$	$	M.	M.	$	$	p. c.	p. c.
								NEW YORK.													
30 Sep. '59	—	—	—	140.0	—	—	—	Albany and Susquehanna	406,952	—	—	404,950	—	31,135	436,085	—	—	—	—	—	—
30 Sep. 58	32.9	—	3.3	—	5	12	53	Albany and Vermont	1,557,502	136,038	—	439,005	1,575,099	50,000	—	32.9	93,894	84,119	11,215	—	—
30 Sep. '59	38.3	—	34.0	—	—	—	—	Albany and West Stockbridge	2,392,984	*	—	1,000,000	1,932,984	—	2,392,984	ope	r by W	estern.	—	6	100
30 Sep. '59	34.9	2.6	.....	73.6	4	6	39	Black River and Utica	1,156,148	81,405	—	804,648	700,000	8,158	1,512,806	37.5	36,838	62,941	32,952	—	—
30 Sep. '59	14.8	—	1.6	—	—	—	—	Blossburg and Corning	496,661	—	—	250,000	220,000	—	—	14.8	20,647	26,858	13,429	5	—
30 Sep. '60	142.0	—	14.4	18.5	28	32	402	Buffalo, New York and Erie	3,163,766	*	213,158	680,000	2,413,516	201,682	3,627,620	142.0	568,448	580,000	242,954	—	—
30 Sep. '59	68.3	—	18.0	—	28	34	312	Buffalo and State Line	2,467,258	312,736	449,000	1,934,850	1,049,000	161,263	3,145,213	87.8	370,488	848,327	419,378	10	120
30 Sep. '59	24.6	—	38.1	—	—	—	—	Cayuga and Susquehanna	1,057,629	37,971	—	687,000	411,000	—	1,098,000	34.6	61,435	59,265	10,398	4½	—
30 Sep. '59	17.4	—	2.1	—	—	—	—	Chemung	400,000	*	—	380,000	70,000	—	450,000	ope	r. by N.	Y. & E.	24,000	6	—
30 Sep. '59	46.8	—	2.9	—	10	8	83	Elmira, Jefferson & Canand.	500,000	*	—	500,000	—	—	500,000	ope	r. by Re	ceivers.	30,000	6	—
30 Sep. '59	—	—	—	63.2	—	—	—	Erie and New York City	287,357	*	—	352,741	14,000	28,716	395,457	—	—	—	—	—	—
30 Sep. '59	—	—	—	15.0	—	—	—	Genesee Valley	329,225	*	—	75,689	165,000	62,500	329,225	ope	r. b. B.N.	Y. & E.	—	—	—
30 Sep. '59	17.3	—	0.5	—	4	3	50	Hudson and Boston (West'rn)	148,000	27,000	—	175,000	—	—	—	17.3	57,065	63,803	11,999	6	—
30 Sep. '59	144.0	—	106.5	—	52	107	542	Hudson River	10,205,906	1,182,372	—	3,758,466	8,842,000	414,644	—	150.0	700,224	1,842,636	770,096	—	33½
30 Sep. '59	—	—	—	73.8	—	—	—	L. Ontario, Auburn & N. York	74,203	—	—	75,771	—	—	—	—	—	—	—	—	—
30 Sep. '59	—	—	—	182.0	—	—	—	L. Ontario and Hudson River	3,497,538	178,320	—	2,715,186	870,000	115,856	—	—	—	—	—	—	—
30 Sep. '60	84.0	2.5	10.1	8.0	18	37	129	Long Island	2,566,270	*	—	1,852,716	755,998	12,283	—	97.5	—	(343,021	154,369	—	10
30 Sep. '60	297.8	258.1	313.8	—	211	237	3,171	New York Central	31,106,094	*	963,331	24,000,000	14,332,523	127,375	40,638,447	655.9	3,945,128	6,957,241	2,678,400	6	72½
30 Sep. '60	446.0	19.0	282.5	—	219	194	2,763	New York and Erie	31,148,015	4,172,192	1,311,385	11,000,000	25,326,505	2,074,795	38,401,300	495.0	3,019,000	5,180,321	1,827,406	—	22
30 Sep. '60	138.0	2.1	29.6	—	33	93	576	New York and Harlem	8,022,786	*	—	5,717,190	6,055,752	—	—	152.9	—	1,142,851	433,716	—	10½
30 Sep. '59	118.0	3.8	17.7	—	28	8	417	Northern (Ogdensburg)	4,097,208	702,079	—	3,077,900	1,500,000	—	4,799,287	121.8	347,800	382,932	120,850	—	—
30 Sep. '60	35.9	—	2.2	—	7	6	44	Oswego and Syracuse	791,002	*	—	396,340	213,500	4,875	—	35.9	69,759	119,666	64,753	8	—
30 Sep. '59	75.4	—	2.0	—	6	4	33	Pottsdam and Watertown	1,527,072	67,884	—	665,419	911,000	192,748	1,769,167	75.4	107,046	100,047	47,571	—	—
30 Sep. '59	25.2	—	2.1	—	5	13	70	Rensselaer and Saratoga	743,968	157,057	—	610,000	140,000	—	901,025	46.2	61,900	235,902	108,769	6	—
30 Sep. '59	18.4	—	1.3	32.6	—	—	—	Rochester and Genesee Valley	652,151	1,776	—	557,560	150,000	23,496	731,056	18.4	135,000	44,220	24,661	2	—
30 Sep. '59	18.0	—	1.0	—	—	2	32	Sacketts Harbor and Ellisburg	371,556	17,714	—	167,485	278,400	56,810	—	18.0	17,620	12,025	—	—	—
30 Sep. '59	21.0	—	1.6	—	2	3	10	Saratoga and Schenectady	480,684	*	—	300,000	85,000	—	385,000	ope	r. by Ren	s. & Sar.	30,150	7	—
30 Sep. '59	40.9	6.6	3.9	—	9	12	84	Saratoga and Whitehall	820,518	74,904	—	500,000	395,000	—	895,000	54.5	107,506	154,099	7,493	—	—
30 Sep. '59	—	—	—	13.2	—	—	—	Staten Island	114,015	*	—	50,603	41,200	22,686	114,489	—	—	—	—	—	—
30 Sep. '59	11.0	—	.....	—	—	—	—	Brooklyn and Jamaica	369,856	—	—	284,850	85,000	—	—	ope	r. by Lo	ng Isl.	37,560	9	—
30 Sep. '59	81.3	—	7.1	—	13	12	117	Syracuse and Binghamton	2,851,292	*	—	1,200,130	1,643,126	146,079	2,989,335	81.3	176,273	196,402	112,155	—	—
30 Sep. '59	27.2	—	3.2	7.7	10	6	76	Troy and Boston	1,366,826	143,687	—	604,911	806,500	247,676	1,659,087	51.0	194,921	218,689	103,010	—	—
30 Sep. '59	6.0	—	0.1	—	—	—	—	Troy and Greenbush	294,731	—	—	275,000	—	—	294,731	ope	r. b. Hud	s. River.	—	6	—
30 Sep. '59	2.1	—	2.1	—	—	—	—	Troy Union	732,114	—	—	30,000	680,000	—	732,114	ope	r. by oth	er Co's.	—	—	—
30 Sep. '59	96.8	—	11.0	—	7	11	288	Watertown and Rome	1,839,787	319,715	—	1,498,500	685,000	65,683	2,249,183	96.8	219,280	362,994	154,752	3	—
								NORTH CAROLINA.													
31 May, '60	94.9	—	6.4	—	—	—	—	Atlantic and North Carolina	2,157,503	*	—	1,545,225	400,000	276,372	2,419,401	94.9	—	103,953	35,572	—	—
-- -- '58	223.0	—	—	—	—	—	—	North Carolina	4,235,000	*	—	4,000,000	—	—	—	223.0	—	—	—	—	—
-- -- '59	97.0	—	—	—	—	—	—	Raleigh and Gaston	1,240,241	*	—	973,300	126,200	—	—	97.0	—	206,917	108,541	—	—
30 Sep. '60	161.5	15.0	—	—	23	18	182	Wilmington and Manchester	2,632,737	*	232,900	1,130,470	1,045,000	51,300	2,934,509	171.9	—	469,458	219,688	—	—
30 Sep. '59	161.9	—	—	—	24	32	144	Wilmington and Weldon	2,869,223	*	107,000	1,340,213	791,055	102,391	3,114,954	171.0	323,069	477,554	235,201	8	—
15 Mar. '60	81.0	3.0	—	192.5	—	—	—	Western North Carolina	2,000,000	*	4,700	290,212	—	70,860	364,072	—	—	—	—	—	—
								OHIO.													
-- -- '58	—	—	—	.....	—	—	—	Atlantic and Great Western	613,231	—	—	866,939	—	77,294	—	—	—	—	—	—	—
31 Dec. '59	118.2	—	.....	—	17	12	208	Bellefontaine and Indiana	3,088,218	*	10,000	1,859,813	1,267,078	64,251	3,565,956	118.2	—	286,368	81,508	—	—
1 Aug. '59	137.0	—	.....	—	41	39	508	Central Ohio	5,579,508	922,670	106,133	1,628,356	3,673,000	1,126,458	6,810,432	141.0	—	597,633	71,356	—	—
31 Mar. '59	60.3	—	.....	—	22	28	432	Cinc., Hamilton and Dayton	2,648,266	504,892	26,500	2,155,800	1,411,000	32,618	3,650,710	60.3	—	489,437	249,666	7	71
31 Dec. '60	30.0	—	.....	69.1	—	—	—	Cinc. and Indianapolis Junc.	—	—	—	—	—	—	—	32.0	—	—	—	—	28
1 May, '59	131.8	—	.....	31.0	16	10	332	Cinc., Wilmington and Zanesv.	6,250,841	*	—	2,441,176	3,032,000	228,973	—	131.8	304,168	190,745	19,180	—	—
31 Dec. '60	135.4	5.8	.....	—	42	31	439	Cleveland, Columbus and Cinc.	4,087,571	684,955	67,422	4,746,100	38,000	8,242	5,343,275	141.2	—	1,084,692	574,275	12	91
31 Dec. '60	67.0	—	.....	18.0	12	11	251	Cleveland and Mahoning	2,500,017	268,303	298,971	1,155,152	1,693,300	304,182	3,341,020	67.0	230,461	369,849	238,003	—	89½
31 Dec. '60	95.4	1.2	37.9	—	30	42	470	Clev., Painesville & Ashtabula	3,221,635	549,593	541,503	3,000,000	1,602,000	—	—	96.6	402,935	1,063,405	633,647	15	125
30 Nov. '58	101.0	102.5	.....	—	42	—	—	Cleveland and Pittsburg	9,320,288	*	—	3,942,368	4,918,325	653,821	9,661,102	203.5	646,413	772,093	332,093	4	9
30 Apr. '59	109.2	79.4	.....	—	32	52	430	Cleveland and Toledo	6,729,056	458,194	258,424	3,343,812	3,842,720	358,605	7,558,918	188.6	—	798,155	414,456	6	21½
31 Dec. '58	61.4	—	.....	53.0	5	6	99	Clev., Zanesville and Cincin.	1,574,693	*	—	369,673	575,250	632,486	—	61.5	75,120	68,128	19,763	—	—
31 Dec. '58	72.0	—	.....	31.0	6	9	103	Columbus and Indianapolis	2,555,000	*	—	750,000	1,600,000	205,000	—	72.0	144,000	84,000	17,760	—	50
30 Nov. '58	54.5	—	10.4	—	—	—	—	Columbus and Xenia	1,376,250	392,909	112,734	1,490,000	290,700	50,500	1,965,539	ope	r. w. Lit.	Miami.	170,795	8	81
31 Mar. '60	144.0	—	.....	—	—	—	—	Dayton and Michigan	5,241,748	65,147	4,800	2,108,380	2,513,400	394,667	5,672,797	144.0	144,606	211,149	111,054	—	—
31 Aug. '60	36.6	—	.....	—	5	3	87	Dayton and Western	999,173	104,912	—	307,246	716,000	80,845	1,104,086	36.6	—	62,025	3,565	—	—
31 Aug. '58	16.0	—	.....	47.0	3	2	21	Dayton, Xenia and Belpre	860,496	*	—	437,838	422,658	—	—	16.0	40,064	64,000	33,000	—	—
31 Dec. '60	45.0	—	.....	—	6	5	72	Eaton and Hamilton	1,101,744	79,022	62,630	469,762	728,853	152,694	1,358,867	45.0	—	152,328	43,865	—	—
-- -- '59	36.0	—	.....	84.0	—	—	—	Fremont and Indiana	—	—	—	—	—	—	—	—	—	—	—	—	—
31 Aug. '58	32.0	—	.....	—	6	5	68	Greenville and Miami	888,000	*	—	300,000	473,000	75,000	—	47.0	60,901	63,141	13,573	—	—
30 Nov. '58	13.0	—	.....	34.0	1	2	50	Iron	172,830	*	—	118,865	50,000	3,965	—	13.0	24,000	31,126	10,460	—	—
30 Nov. '58	83.5	—	37.8	—	39	32	602	Little Miami	3,451,179	785,817	438,857	2,981,293	1,399,000	34,196	4,709,137	138.0	637,835	1,200,499	341,591	8	81
31 Dec. '58	173.8	21.6	.....	—	33	26	523	Marietta and Cincinnati	9,517,551	1,115,662	574,000	3,477,705	7,405,917	1,754,220	13,202,262	195.4	556,732	374,198	45,452	—	—
30 Apr. '59	192.3	—	.....	—	48	34	628	Ohio and Mississippi	18,635,688	*	*	6,584,681	9,880,000	2,330,030	18,794,721	192.3	—	881,957	312,441	—	1½
31 Aug. '58	117.0	8.0	.....	—	17	16	238	Pittsburg, Columbus and Cin.	4,772,951	*	—	1,906,736	2,400,000	466,215	—	125.0	—	—	—	—	—
30 Jun. '59	153.9	52.0	.....	—	39	27	365	Sandusky, Dayton and Cinc.	3,988,154	605,900	197,967	2,697,090	2,134,000	439,261	5,508,357	205.9	—	577,958	211,894	—	—
31 Dec. '60	116.0	9.0	.....	—	13	20	206	Sandusky, Mansfield & New'k	2,309,125	*	—	848,770	1,355,200	132,063	2,588,876	125.0	—	185,934	34,167	—	—
30 Nov. '58	55.6	—	.....	74.0	7	3	64	Scioto and Hocking Valley	1,103,975	*	—	403,975	500,000	100,000	—	55.6	70,000	110,200	53,100	—	—
31 Aug. '58	19.5	—	.....	23.5	—	—	—	Springfield and Columbus	346,500	—	—	193,000	150,000	3,500	346,500	ope	r. by C.,	C. & C.	—	—	—
30 Nov. '58	49.8	—	.....	62.2	5	6	62	Springfield, Mt. Vern. & Pittsb.	2,205,000	*	—	1,000,000	1,050,000	200,000	2,250,000	49.8	222,000	—	—	—	—
31 Aug. '60	243.0	—	.....	—	35	18	580	Toledo, Wabash and Western	8,019,539	*	17,613	2,123,500	5,343,650	488,265	8,498,947	250.0	—	861,722	373,772	—	—
								PENNSYLVANIA.													
31 Jan. '61	45.0	—	3.0	136.2	4	6	97	Alleghany Valley	—	—	—	—	378,455	62,624	—	45.0	61,634	94,342	45,161	—	—
31 Aug. '59	20.5	—	23.2	—	15	2	4,005	Beaver Meadow	966,792	260,000	—	1,410,900	2,000	—	1,412,900	20.5	—	311,201	164,554	10	65
31 Aug. '59	63.5	—	3.0	—	22	13	282	Catawissa, Williamsp't & Erie	3,518,785	364,571	—	1,700,000	2,271,536	436,228	4,407,764	119.0	—	337,257	90,438	—	11½
30 Sep. '60	52.5	—	3.2	—	11	8	66	Cumberland Valley	1,192,111	*	—	756,900	270,500	48,358	1,296,568	52.5	—	182,673	116,822	8	—
31 Dec. '60	110.8	2.3	36.0	—	74	17	4,422	Del., Lackawanna and West'n	9,145,951	*	106,150	5,189,157	5,222,916	733,622	11,680,357	202.0	—	2,191,336	1,316,688	6	75
30 Nov. '59	36.3	—	2.3	—	3	3	—	East Pennsylvania	900,000	16,617	—	386,121	365,500	188,515	940,136	36.3	—	—	—	—	—
30 Sep. '59	18.6	—	4.0	—	—	—	—	Erie and Northeast	700,000	—	—	600,000	400,000	—	1,000,000	ope	r. b. Buf.	& S. L.	—	10	—
31 Aug. '60	36.9	18.6	21.9	—	—	—	—	Harrisburg and Lancaster	1,882,555	—	—	1,087,100	661,000	—	1,883,343	55.5	—	436,237	153,334	6	54
31 Aug. '59	32.3	—	1.2	44.1	3	2	17	Hempfield	1,388,168	*	—	1,809,563	—	—	1,809,563	32.3	—	32,411	7,267	—	—
31 Aug. '59	30.9	11.3	4.6	—	6	3	1,000	Huntingdon and Broad Top	1,354,724	*	—	425,015	1,000,000	206,550	1,631,565	42.2	—	84,017	3,413	—	—
30 Sep. '59	68.9	—	2.2	11.1	10	6	318	Lackawanna and Bloomsburg	2,057,303	107,000	—	710,000	1,100,000	167,303	2,164,303	68.9	—	116,200	67,600	—	—
30 Nov. '60	45.7	—	22.3	20.2	15	6	—	Lehigh Valley	3,787,533	*	—	1,966,350	1,500,000	—	—	45.7	183,500	679,908	342,039	6	25
30 Nov. '59	28.0	5.0	13.5	—	9	—	—	Little Schuylkill	3,299,600	*	—	2,256,100	942,500	85,000	3,299,600	ope	r. by C.,	W. & E.	—	—	19
31 Dec. '59	20.0	—	4.0	—	—	—	—	Lehigh Coal and Navigation	1,380,000	—	4,455,000	2,479,900	3,619,304	231,532	2,991,156	—	—	595,857	503,660	6	52½
30 Nov. '59	24.5	74.8	45.5	1.5	28	2	3,026	Mine Hill and Schuylk. Haven	2,594,228	266,838	—	2,800,000	—	—	2,991,150	72.3	—	556,192	379,976	10	—
30 Nov. '60	55.6	10.1	9.7	—	17	20	504	North Pennsylvania	5,391,542	393,977	—	3,155,829	2,961,267	208,713	6,346,800	65.7	232,650	389,622	212,959	—	8½
31 Dec. '60	331.1	28.1	391.7	—	205	124	2,668	Pennsylvania	23,581,158	3,065,289	3,474,545	13,261,960	17,163,947	367,489	32,407,124	423.0	3,476,812	5,932,701	2,296,402	6	78½
30 Sep. '59	12.0	—	0.3	67.0	1	1	1	Phila. and Baltimore Central	264,000	10,000	—	—	250,000	50,000	—	20.0	—	1,637	—	—	—
30 Sep. '59	17.0	7.0	.....	—	16	—	—	Phila., Germant'n & Norristt'n	1,422,977	228,555	—	1,208,500	374,800	104,720	1,742,333	24.0	—	288,657	157,194	—	—
30 Nov. '60	147.4	4.0	61.0	—	149	57	5,697	Philadelphia and Reading	19,390,868	2,121,010	20,180	11,737,041	12,195,950	1,125,000	26,057,991	151.4	—	3,312,546	858,597	—	31½
31 Dec. '59	28.0	—	—	—	—	—	—	Philadelphia and Trenton	1,000,000	—	—	1,000,000	—	—	1,000,000	28.0	oper. by	Cam. &	Amboy	—	125
31 Oct. '60	98.0	6.0	.....	—	30	93	521	Phila., Wilmington and Balt.	7,800,000	*	—	5,000,000	2,300,000	—	—	200.5	48,677	1,826,597	471,712	6½	32½

RAILROAD SHARE LIST, including Mileage, Rolling Stock, etc., etc.

An *asterick* (*) occurring in the column headed "Rolling-Stock," signifies that the cost is included in that of "Railroad and Appurtenances." A *dash* (—) signifies "nil. Running *dots* (.....) signify "not ascertained." Land-Grant Railroads are in "*italics.*"

Years ending.	Railroad. Main Line.	Lateral and Branch Lines.	2nd Track and Sidings.	Road in progress or projected	Equipment. Engines.	Cars. Passenger.	Cars. Freight, etc.	Companies.	Abstract of Balance Sheet. Property and Assets. Railroad and Appurtenances.	Rolling Stock.	Invested in foreign works.	Liabilities. Share Capital paid in.	Bonded and Mortgage Debt.	Floating Debt.	Balance incl. all other assets and liabilities.	Total.	Road operated, incl. road leased, etc.	Mileage run by locomotives with trains.	Earnings. Gross.	Net.	Dividends.	Price of shares.
	M.	M.	M.	M.	No	No	No.		$	$	$	$	$	$	$	$	M.	M.	$	$	p. c.	p. c.
								PENNSYLVANIA, (*Continued.*)														
31 Oct. '60	48.9	—	3.2	99.5	7	7	65	Pittsburg and Connellsville	2,724,803	81,136	—	1,755,826	1,292,700	67,869	3,378,707	60.0	113,775	80,553	29,690	—	----
30 Nov. '59	467.5	—	56.3	—	96	80	1,059	Pittsb'g, Ft. Wayne & Chicago	15,557,779	1,785,182	91,100	6,266,278	8,895,457	1,883,847	17,269,419	467.5	1,859,031	1,965,988	674,655	—	4
30 Sep. '59	31.0	—	----	11.0	----	----	----	Pittsburg and Steubenville	1,947,462	*	—	1,221,277	280,000	----	----	----	----	----	----	—	----
30 Sep. '59	54.0	—	3.0	—	7	7	26	Schuylkill and Susquehanna	1,258,700	*	—	1,258,700	97,000	----	1,355,700	54.0	----	----	----	—	----
30 Sep. '59	9.2	15.3	14.9	—	—	—	—	Schuylkill Valley	573,616	*	—	568,150	----	----	573,616	24.5	----	34,501	29,604	3½	----
30 Nov. '59	28.0	5.0	3.3	—	4	1	445	Shamokin Valley & Pottsville	1,321,847	*	—	500,000	821,447	----	1,321,847	33.0	----	96,227	54,582	—	----
31 Dec. '59	148.0	—	20.0	140.0	----	----	----	Sunbury (Phila.) and Erie	6,393,712	107,252	—	4,506,920	4,369,070	861,271	10,169,869	148.0	----	----	----	—	----
30 Nov. '59	29.6	6.5	31.9	—	8	3	127	Tioga	703,349	85,932	—	97,550	396,000	----	----	29.6	----	83,072	47,007	6	----
30 Sep. '59	26.4	—	2.1	—	4	11	9	Westchester and Philadelphia	1,410,638	74,677	—	682,170	944,169	52,434	1,679,301	26.4	----	125,597	4,502	—	----
31 Mar. '59	78.0	—	----	—	----	----	----	Williamsport and Elmira	3,650,682	380,847	—	1,500,000	2,361,973	161,272	4,148,920	----	----	191,970	96,308	—	1
								RHODE ISLAND.														
31 Aug. '58	50.0	—	2.0	—	9	13	84	N. Y., Providence and Boston	2,158,000	*	—	1,508,000	306,500	----	2,158,000	50.0	147,231	208,439	96,571	5	----
30 Nov. '58	13.6	—	0.5	—	—	3	5	Providence, Warren & Bristol	434,698	1,588	—	287,917	109,937	36,139	----	13.6	23,514	23,005	1,278	—	----
								SOUTH CAROLINA.														
31 Dec. '58	13.2	1.5	----	182.4	2	—	26	Blue Ridge	2,126,539	----	—	1,916,515	217,577	----	2,134,092	13.2	----	----	----	—	----
31 Dec. '58	54.9	—	----	47.4	4	3	21	Charleston and Savannah	801,615	34,372	250,000	706,365	195,266	197,905	1,099,536	51.9	----	----	----	—	----
31 Dec. '58	109.6	—	----	—	13	9	176	Charlotte and South Carolina	1,719,045	*	—	1,201,000	384,000	----	----	109.6	----	283,263	151,536	6	----
— — '58	40.3	—	----	—	----	----	----	Cheraw and Darlington	600,000	*	—	400,000	200,000	----	----	49.3	----	----	----	—	----
1 Jan. '59	143.2	21.3	----	—	----	----	----	Greenville and Columbia	2,439,769	324,161	—	1,429,008	1,145,000	345,546	2,919,554	164.5	----	341,190	125,871	—	----
31 Aug. '58	22.5	—	----	—	----	----	----	Kings Mountain	196,230	*	—	200,000	----	----	200,000	22.5	----	----	----	5	----
31 July '58	32.0	—	----	—	----	----	----	Laurens	543,403	*	—	400,000	106,218	----	575,729	32.0	----	27,568	8,527	—	----
28 Feb. '59	102.0	—	----	—	----	----	----	North-Eastern	2,011,652	*	—	985,743	960,410	108,172	2,057,325	102.0	----	220,014	96,145	—	----
31 Dec. '60	136.0	106.0	----	—	62	59	790	South Carolina	----	----	—	----	2,643,833	----	----	----	----	1,499,636	701,943	7	----
31 July '58	25.1	—	----	41.9	----	----	----	Spartanburg and Union	----	----	—	----	----	----	----	25.1	----	----	----	—	----
								TENNESSEE.														
30 Sep. '60	47.6	—	----	—	----	----	----	Central Southern (Tenn.)	1,021,439	58,133	—	505,214	514,000	99,110	1,137,707	47.6	----	29,967	19,187	—	----
1859	----	—	----	17.0	2	—	14	Edgefield and Kentucky	857,947	*	—	333,204	612,000	60,900	----	30.0	29,845	9,359	7,486	—	----
1859	30.0	—	1.8	—	12	10	171	East Tennessee and Georgia	3,637,367	*	—	1,289,673	2,020,000	200,000	----	140.0	----	318,718	187,466	—	----
1859	140.0	—	8.0	—	10	10	128	East Tennessee and Virginia	2,310,033	156,264	—	536,654	1,902,000	390,407	----	130.3	150,142	297,806	3 149,167	—	----
1860	271.6	19.4	20.0	—	43	37	667	Memphis and Charleston	5,866,578	878,069	129,364	3,809,949	2,659,000	260,112	7,627,797	291.0	----	1,635,096	873,597	—	----
1859	271.6	16.0	20.0	3.9	9	5	242	Memphis and Ohio	2,259,267	141,144	—	570,000	1,361,000	145,000	----	----	----	----	----	—	----
1859	100.0	—	30.6	55.8	----	----	----	Memphis, Clarksv. & Louisv.	2,000,000	100,500	—	298,721	740,000	----	----	----	----	----	----	—	----
1859	59.0	—	----	40.1	7	5	119	Mississippi and Tennessee	1,137,400	*	—	798,285	554,949	319,518	----	59.4	69,870	177,256	60,029	—	----
1859	47.4	—	2.3	—	4	5	46	Mississippi Central and Tenn.	892,710	82,908	—	317,447	632,500	22,369	----	47.4	54,175	83,129	44,666	—	----
1859	34.2	—	7.0	—	12	2	81	McMinnville and Manchester	533,807	56,816	—	144,894	406,000	5,000	----	34.2	30,065	23,808	13,892	—	----
30 Nov. '60	149.7	44.0	7.9	—	39	17	819	Nashville and Chattanooga	3,632,882	*	—	2,056,544	1,731,000	----	----	159.0	----	734,118	337,384	6	----
1859	----	—	----	—	----	----	----	Nashville and Northwestern	----	----	—	----	----	----	----	----	----	----	----	—	----
1860	45.8	—	4.2	11.7	5	5	32	Tennessee and Alabama	76,016	76,016	—	595,922	860,000	204,544	----	45.8	57,950	127,953	87,243	—	----
1859	30.0	—	0.6	8.0	----	----	----	Winchester and Alabama	----	----	—	216,962	413,000	408,477	----	30.0	----	1,248	----	—	----
								TEXAS, (*all aided by State*).														
— — '58	32.0	—	----	158.0	----	----	----	Buffalo Bayou, Braz. & Col'r'do	----	----	—	----	----	----	----	32.0	----	----	----	—	----
— — '58	56.0	—	----	184.0	----	----	----	Galvest., Houst. & Henderson	----	----	—	----	----	----	----	56.0	----	----	----	—	----
— — '60	50.0	—	1.5	75.0	2	1	40	Houston and Brazoria	1,250,000	----	—	275-000	240,000	171,556	----	50.0	31,300	32,670	----	—	----
1 May '60	70.0	—	6.0	280.0	7	5	124	Houston and Texas Central	4,232,345	*	—	455,000	975,000	369,000	----	70.0	102,200	282,846	196,568	—	----
— — '59	25.0	—	----	110.0	----	----	----	San Antonio & Mexican Gulf	----	----	—	----	----	----	----	25.0	----	----	----	—	----
— — '59	28.0	—	----	756.0	----	----	----	Southern Pacific	----	----	—	----	----	----	----	28.0	----	----	----	—	----
								VERMONT.														
31 May, '60	90.7	—	8.6	19.6	8	8	188	Connect. & Passumpsic Rivers	1,514,132	193,422	—	1,280,400	800,000	----	----	90.7	122,200	187,646	64,619	—	----
31 Aug. '60	119.6	—	13.0	—	26	18	600	Rutland and Burlington	3,989,708	617,743	—	2,233,376	3,172,550	579,119	6,385,045	119.6	349 440	334,368	113,318	—	----
31 Aug. '60	62.0	----	4.0	—	10	6	174	Rutland and Washington	1,771,683	*	—	950,000	----	----	----	62.0	142,839	150,318	30,288	—	----
31 Aug. '60	119.0	—	20.0	—	42	28	885	Vermont Central	8,402,055	*	—	5,000,000	3,853,000	1,423,299	10,276,299	166.0	706,817	775,569	127,727	—	----
31 Aug. '60	47.0	—	2.8	—	—	—	—	Vermont and Canada	1,350,695	—	—	1,350,000	—	—	1,380,695	ope	r. by Vt.	Central	----	—	90
31 Aug. '60	23.7	—	0.7	—	3	4	43	Vermont Valley	1,212,274	89,612	—	516,164	793,200	—	----	23.7	47,950	45,930	8,522	—	----
31 Aug. '60	54.0	10.5	----	—	----	----	----	Western Vermont	1,083,500	*	—	332,000	700,000	----	1,083,500	ope	r.b.Troy	& Bost.	55,858	—	----
								VIRGINIA.														
31 Aug. '59	41.3	—	—	122.1	----	----	----	Alex., Loudoun & Hampshire	1,492,194	42,000	—	1,403,018	36,188	88,131	1,534,194	----	----	----	----	—	----
30 Sep. '59	77.8	8.9	3.8	105.6	9	5	221	Manassas Gap	2,942,548	210,680	—	2,969,861	775,500	118,789	----	113.7	703,034	136,302	43,062	—	----
30 Sep. '59	79.2	—	4.8	—	5	2	75	Norfolk and Petersburg	2,006,873	122,156	—	1,500,124	590,610	155,161	9 months	79.2	47,702	54,121	16,332	—	----
30 Sep. '59	103.5	—	----	—	8	----	----	Northwestern Virginia	5,322,150	*	—	468,605	5,719,229	----	----	103.5	345,427	248,004	loss	—	----
30 Sep. '60	88.3	68.4	10.0	—	16	16	175	Orange and Alexandria	----	----	—	2,063,655	2,517,500	590,056	----	167.7	270,846	450,427	222,214	—	----
30 Sep. '59	123.3	10.1	----	—	19	13	279	Petersburg and Lynchburg	3,040,636	374,996	—	1,365,300	1,851,500	292,842	4,745,256	133.4	----	410,166	201,344	—	----
30 Sep. '59	59 2	21.3	----	—	14	17	131	Petersburg and Roanoke	1,223,526	*	—	883,200	102,500	5,799	1,486,527	80.5	----	326,554	213,852	7½	----
30 Sep. '60	140.5	2.7	12.0	—	28	30	418	Richmond and Danville	6,726,037	*	—	1,981,197	1,200,000	75 908	6,753,655	143.2	224,014	560,904	282,328	—	57
30 Sep. '59	75.1	—	4.5	—	11	10	196	Richm., Frederick & Potomac	1,985,579	*	52,800	1,041,880	643,960	96,828	----	78.6	159,981	279,945	145,385	7	77
30 Sep. '59	22.2	2.8	5.1	—	10	7	188	Richmond and Petersburg	1,222,523	*	—	835,750	204,808	26,853	----	43.5	1,058,054	163,753	79,585	6	60
30 Sep. '59	23.7	—	0.2	14.6	2	—	23	Richmond and York River	704,840	20,554	—	657,812	85,000	----	----	23.7	12,542	----	----	—	----
31 Jan. '60	80.0	—	----	—	10	11	161	Seaboard and Roanoke	1,469,246	*	1,200	844,200	472,811	52,926	1,639,648	80.0	----	240,446	121,053	7	----
30 Sep. '60	178.2	—	21.3	7.0	27	19	228	Virginia Central	4,952,753	541,197	33,948	3,162,754	1,480,592	52,929	4,832,929	195.0	280 968	634,081	359,130	5	47½
30 Jun. '60	204.7	9.4	10.6	—	39	27	374	Virginia and Tennessee	5,994,259	838,475	2,400	3,452,813	3,265,000	571,958	10,233,271	214.9	480,193	740,489	347,957	—	----
30 Sep. '59	32.0	—	2.5	—	5	4	49	Winchester and Potomac	516,830	59,000	—	300,000	120,000	24,736	----	32.0	30,000	49,971	14,469	—	----
								WISCONSIN.														
1 Dec. '59	55.0	—	2.0	121.0	3	2	40	Kenosha and Rockford	1,500,000	55,000	—	800,000	700,000	25.000	----	55.0	----	----	----	—	----
25 Mar. '59	199.8	—	----	—	----	----	----	*Milwaukee and Minnesota*	----	----	—	10,872,000	10,414,066	996,587	22,282,653	199.8	----	492,454	----	—	----
31 Dec. '58	40.0	—	----	—	5	10	75	Milwaukee and Chicago	1,830,073	*	23,304	1,000,000	600,000	246,365	1,908,555	40.0	74,243	159,456	82,182	—	----
— — '57	42.0	—	—	27.8	----	----	----	Milwaukee and Horicon	919,757	*	—	1,101,200	----	----	----	42.0	10 mos.	60,066	----	—	----
31 Dec. '60	191.9	42.5	28.3	—	----	----	----	*Milw'kee and Prairie du Chien*	7,500,000	*	—	4,944,000	2,556,000	—	7,500,000	234.4	----	883,186	439,943	—	12
— — '57	50.0	—	—	85.0	----	----	----	Milw., Watertown & Baraboo	514,238	----	—	345,861	132,000	----	----	50.0	----	121,401	----	—	----
1 Jan. '58	104.0	—	----	38.8	----	----	----	Racine and Mississippi	3,802,016	*	—	2,705,720	1,417,000	1,085,328	5,692,471	86.0	----	213,964	31,045	—	----
— — '58	10.0	—	----	55.0	—	—	—	Wisconsin Central	600,000	—	—	----	----	----	operated	by	Fox Riv	er Vall.	----	—	----
								CANADA.														
31 July '59	158.5	—	----	—	26	24	341	Buffalo and Lake Huron	2,884,887	740,870	—	3,715,762	187,366	107,067	4,010,195	158.5	363,213	----	----	—	----
— — '59	81.0	—	----	—	16	17	214	Montreal and Champlain	----	----	—	----	----	----	----	81.0	166,245	----	----	—	----
— — '59	37.0	11.0	----	72.0	2	2	17	Brockville and Ottawa	----	----	—	----	----	----	----	48.0	----	----	----	—	12
30 Sep. '58	624.0	137.0	----	78.0	204	130	2,399	Grand Trunk	46,651,084	*	—	15,603,128	31,351,133	—	46,954,261	761.0	2,049,997	1,069,219	4,000	6	38
— — '59	229.0	128.0	----	—	87	126	1,689	Great Western	22,153,321	*	—	14,054,908	8,480,849	----	----	357.0	1,360,900	----	----	3	----
— — '59	24.0	—	----	—	2	2	52	London and Port Stanley	----	----	—	----	----	----	----	24.0	37,081	----	----	—	----
— — '59	95.0	1.6	----	—	17	20	337	Northern (O. S. & H.)	----	----	—	----	----	----	----	96.6	254,530	----	----	—	----
— — '59	54.0	—	----	—	5	8	118	Ottawa and Prescott	----	----	—	----	----	----	----	54.0	89,222	----	----	—	----
— — '59	25.0	—	----	—	4	—	57	Welland	----	----	—	----	----	----	----	25.0	----	----	----	—	----
								NEW BRUNSWICK.														
31 Oct. '60	108.0	0.9	12.0	—	12	18	236	European & North American	4,085,560	326,164	—	4,451,012	—	—	4,451,012	108.0	193,683	116,225	41,985	—	----
31 Dec. '60	60.0	—	----	----	----	----	----	New Brunswick and Canada	1,402,748	102,388	—	1,380,000	13,100	136,000	1,799,232	60 0	----	----	----	—	----
								NOVA SCOTIA.														
— — '59	61.5	—	----	60.1	----	----	----	Nova Scotia	----	----	—	----	----	----	----	61.5	----	----	----	—	----
								NEW GRANADA.														
Dec '60	48.7	—	----	—	----	----	----	Panama	8,000,000	*	708,000	4,976,000	2,490,238	44,000	9,302,828	48.7	----	1,550,873	1,036,131	12	105

New York Stock Exchange.

Sale Prices for the week ending June 5, 1861.

	Th.30.	F.31.	Sat.1.	M.3.	Tu.4.	W.5.
Federal Stocks:—						
U. S. 5s, 1874	79	78¼	78	78	----	
U. S. 6s, 1881	86½	----	86¼	84½	87½	84½
State Stocks:—						
California 7s	75½	----	----	75	76½	76½
Georgia 6s	----	----	----	----	----	55
Illinois 6s	----	----	----	----	----	----
Indiana 5s	----	----	----	80	80	----
" 2½s	----	----	----	----	----	----
Kentucky 6s	----	----	----	----	----	----
Louisiana 6s	----	54	55	52	55	
Maryland 6s	----	----	----	----	----	----
Michigan 6s	----	----	----	----	----	----
Minnesota 8s	----	----	----	----	----	----
Missouri 6s	40½	40	40	40	40	40
New York 6s, 1870	----	----	----	----	----	----
" 7s, 1864	----	----	----	----	----	----
North Carolina 6s	55½	54	52½	52	50	51
Ohio 6s, 1886	----	----	----	----	----	96
Tennessee 6s, 1890	41	40	41	40	40	40½
Virginia 6s	43½	45	45½	45½	44½	46
Railroad Shares:—						
Chicago, Burl. and Q.	56	55	55	57	55	55
Chicago and Rock Isl.	34	34½	35½	34½	34½	33½
Chicago and N. West.	----	----	----	----	----	----
Clev., Painesv. & Asht.	----	----	----	----	----	----
Clev. and Pittsburg	----	----	----	----	----	----
Clev. and Toledo	22½	23	23½	23	22	21½
Del., Lack. and West	----	----	----	----	----	----
Galena and Chicago	57½	58	57½	57½	58½	57½
Hudson River	34	35	34½	34	34	33½
Illinois Central (scrip)	70	70	68½	68½	69	66
Indianapolis and Cinc.	----	----	----	----	----	----
Michigan Central	42	42	42	42	42	41½
M. S. and N. I. guar'd,	27	28	28	26½	26	25
M. S. and N. I.	12	12	11½	11½	11	11½
Mil. and P. du Chien	12	----	----	----	----	----
New Jersey Central.	102	----	----	----	----	----
New York Central	72½	72½	72	72½	72½	72½
New York and Erie	22	23½	23	23	23	22
N. York and Harlem.	11	11	10½	10½	11	10½
N. Y. and H. "pref."	26	25	25½	25½	25½	25
Panama	104	105	102	105½	104	105
Phila. and Reading	31½	31½	31½	32	31½	31½
Railroad Bonds:—						
Buff., N. Y. & Erie 1 M.	----	----	----	----	----	----
Chic. and N. W. 1st M.	----	----	----	----	35	----
" " 2d M.	----	----	----	----	----	----
" " S. F.	----	----	----	----	----	----
Cl. & Tol. S. F. 7 p.c. '85	----	----	----	----	----	----
D. L. & W. 1M. 8 p.c. '71-5	97½	----	----	----	96	----
" 2M. 8 p.c. '81	----	----	----	----	----	----
Gal. and Ch. 1M. 8 p.c. '63	----	----	97½	----	----	----
" 2M. 8 p.c. '75	----	----	----	----	----	----
Hann. & St. J. 1 M. 8s	----	----	----	----	----	----
Hudson R. 1M. 7 p.c. '69	----	----	----	107	----	----
" 2M. 7 p.c. '60	----	----	----	----	----	----
" 3M. 7 p.c. '75	----	----	80	79	79	----
Illinois Centr. 7 p.c. '75	90	90½	91	92	91½	90½
" " 6 p.c. '75	90	90½	91	92	91½	90½
L. Erie & Wab. 1 M.	----	----	----	----	----	----
" " 2 M.	----	----	----	----	----	----
Mich. Cen. S. F. 8 p.c. '82	94	----	----	93½	----	----
" conv. 8 p.c. '69	----	----	----	----	----	----
Mich. Southern 1st M.	----	----	----	----	----	----
" " 2d M.	----	----	----	----	----	----
" " S. F.	----	----	71	----	72	----
M. S. & N. I. 1 M. S. F.	----	----	----	----	----	----
" 2 M. 8 p.c. '77	----	----	----	----	----	----
Northern Ind. 1 M.	----	----	----	----	----	----
" " 2 M.	----	----	----	----	----	----
N. J. Central 1st M.	----	----	----	----	----	----
N. Y. C. 6 p.c. certif. '83	----	----	----	----	----	----
" 1 M. 7 p.c. '64	----	----	----	----	----	----
N. Y. & E. 1 M. 7 p.c. '67	----	----	----	----	----	102
" 2 M. 7 p.c. '64	98	----	97½	----	----	----
" 3 M. 7 p.c. '83	----	85	----	83	----	----
" 4 M. 7 p.c. '80	82	----	----	----	----	----
" 5 M. 7 p.c. '83	----	----	----	----	----	----
" conv. 7 p.c. '62	----	----	----	----	----	----
" " 7 p.c. '71	----	----	----	52	----	52
" S. F. '75	----	----	----	----	----	----
N. Y. & H. 1 M. 7 p.c. '73	----	----	----	----	97	----
" 2 M. 7 p.c. '64	----	----	----	----	98	----
" 3 M. 7 p.c. '67	----	----	----	----	----	----
Penn. 1M. 7 p.c. conv. '88	----	----	----	----	----	----
" 2 M. 6 p.c. st'g '75	----	----	----	----	----	----
Ph. and Read. 6 p.c. '60	----	----	----	----	----	----
" " 6 p.c. '70	----	----	----	----	----	----
T. H. and A. 1M. 8s '72	----	----	----	----	----	----
" " 2M. 8s '70	----	----	----	----	----	----
Bank and Insurance Stock:—						
Am. Exchange Bank	79	----	79	----	78	78
America, Bank of	----	----	----	----	----	----
Commerce, Bank of	79½	79½	79½	79	79	79½
Merchants' Exch. B'k	----	----	----	----	----	----
Mercantile (Mar.) Ins.	----	----	----	----	----	----
Commonwealth Bank	----	----	----	----	----	----
Metropolitan Bank	----	----	----	----	83	----
Mining Stock:—						
Pittsburg	----	----	----	----	----	40
Rockland	----	----	----	----	----	12
Minnesota	----	----	----	----	----	60
Isle Royale	----	----	----	----	----	6
Miscellaneous:—						
Del. and Hud. C. Co.	83½	----	----	83½	83	----
Cumberland Coal Co.	----	----	----	----	----	----
Penn'a Coal Co.	----	----	----	----	----	77½
Pacific Mail S. S. Co.	64	64½	64	64	----	
Canton	5	----	----	----	----	----
Brooklyn Water W's	----	----	----	----	----	----

The following are the closing prices in the London Market on the 15th May:

United States 5 p. c. red. '74	75	to	80
Illinois Central 6 p. c. red. 1875	85	to	90
Do. 7 p. c. red. 1875	85	to	88
Do. do. Fr. L'd red. '60.	92½	to	93½
Do. $100 shares, all p'd.	64	to	66
Mich. Cen. 8 per cent. con. '60	90	to	91
Do. do. 1869	84	to	85
Do. do. 1st mortgage (sinking fund), 1883	88	to	90
Do. $100 shares	45	to	50
Michigan S. & N. Indiana 7 per ct. (sinking fund) 1885	65	to	70
Do. $100 shares	10	to	14
New York Central, 6 per cent. (sinking fund) 1883	81	to	83
Do. 7 per cent. 1864	89	to	91
Do. 7 per cent. (sinking f.) 1876.	90	to	94
Do. $100 shares	64	to	66
New York and Erie 1st mortgage 7 per cent. 1867	90	to	92
Do. 2d mortgage, 1859	85	to	90
Do. 3d do. 1883, assented	75	to	80
Do. Bonds, 1862, '71, '75 do.	50	to	55
Do. Shares, assented	21	to	22
Pennsylvania Central B'ds, 1st mort. conv. 6 per cent.	82	to	86
Do. 2d mort. 6 per cent. sterling	82	to	86
Do. $50 shares	36	to	38
Phila. and Reading B'ds, 6 p.c., 1860.	75	to	80
Do. 6 per cent. 1870	75	to	80
Do. $50 shares	15	to	20

American Railroad Journal.

Saturday, June 8, 1861.

Money and Business.

The London correspondent of the N. Y. *Commercial Advertiser* "Spectator," well known as one of the Editors of the London *Times*, in his letter of May 18th, says:

"All that can be said is, that of the phenomenon of a country importing bullion at the rate of four or five million dollars a week, while civil war is raging from one end of it to the other, is to continue permanent, stock speculators in every land now at peace will become advocates for an immediate commencement of hostilities, no matter in what quarter, so long as it is likely to produce such an agreeable result. To ordinary minds, even after making every allowance for the abundance of your supplies of grain and the need of Europe in that respect, the magnitude of our gold exports to New York within the past few days appears so anomalous that great surprise will be felt if it be not followed by a reaction.

The fact above stated, of the constant import of gold from England, to the United States, is the best comment we can make on the favorable condition of our business relations with foreign countries. Notwithstanding the war, our nation is growing, in wealth and power.

The war it is true, changes the direction of business, and prostrates commercial credit for the time, but it destroys nothing in the shape of wealth, except to the extent of the actual destruction of existing property. It exposes most fully the evils of our commercial system, founded too largely on credit. The system we borrowed from England, and the war will prove a blessing if it only absolves us from the errors contracted by our too great intimacy with British credit. The policy of England is to buy raw materials, cheap for cash, convert these materials into manufactures, and sell these manufactures, on credit, all over the world. The manufacturers of the British Isles pay from 2 to 3 per cent. per annum for the use of capital; those of the United States, under our system of currency, pay on an average more than four times the price of money in England. Her cheap capital goes all over the world, seizing hold of all the more valuable products, mines and raw materials of every land, which are transported to England in a crude state, and turned into the home workshops. Hence they re-issue, vastly enhanced in value, to absorb the wealth of other nations. The cotton of India is taken up by British capitalists, transported half the circumference of the globe to the mills of Glasgow or Manchester, converted into fabrics, re-shipped to their place of export, and sold to the lords of the soil, cheaper than these last can produce them with their own rude machinery, and the price of labor merely nominal. In the same way are take up the cotton of the Southern States, the wool of Brazil, and raw silks of China and Hindostan, and returned, wrought into every variety of fabric and costume. These goods are exchanged for raw materials, or sold on credit and the slightest disturbance of trade causes at once a flow of specie to London, as the centre of the commercial system of the world, unless there is a demand for food or raw materials, to meet this indebtedness, as in the present year, from the short bread crops of 1860.

Fortunately for us, for the first time in our history, we are able to continue to pay for a series of years, without a resort to the export of specie The surprise of the London correspondent above quoted is real and not feigned. For the year ending June 30, 1860, the United States exported $56,946,851 in specie and bullion, making with other domestic produce $373,189,274 of exports and $26,933,022 of foreign merchandise re-exported or $400,122,296 of gross exports against $356,789,462 in the previous year. The total imports in 1859 were $338,768,130, and $362,163,941 in 1860.

The import entries of foreign merchandise from July 1, 1860, to 30th April, 1861, into New York amounted to $171,600,000
Add three weeks in May 8,153,802

Total to date $179,753,802
Against same time, 1860 208,259,567

Decrease since 1st July $28,505,765

The export clearances of domestic produce and miscellaneous goods (including foreign articles re-exported,) from 1st July, 1860, to 30th April, 1861 ..... $102,561,000
Add three weeks in May 6,813,571

Total to date $109,374,571
Against same time, 1860 69,245,166

Increase to date $40,139,405

The exports of specie from New York from 1st July, 1860, to the present date, are ..$23,487,000
Against same time, 1860 47,852,000

Decrease to date $24,365,000

The receipts of gold from California, Europe, and the West Indies from 1st July, 1860, to May 21, are as follows:

From California $31,708,000
Foreign gold direct 25,134,000
Foreign gold via Boston 5,334,000

Total since 1st July $62,176,000

Exchange on London is now as low as 105 to 105½ in New York, or 4 per cent. below par. In New Orleans on the 28th ult. sterling bills on

London were selling at 98 to 99. The gold continues to arrive here by each successive steamer.

Railroad securities maintain their prices better than any other. Property in railways is now regarded as the safest in the market.

On the 29th of May the United States Government had $5,312,692 on deposit, of which $3,017,931 were subject to draft.

Vergnes' Voltaic Battery.

We invite attention to the interesting paper in to-day's issue, on Vergnes' Voltaic Battery, furnished us for publication by an intelligent correspondent. The propositions so well stated by the writer are worthy the attention of all parties interested in Railways.

Journal of Railroad Law.

THE GRANT TO THE DES MOINES NAVIGATION AND RAILROAD COMPANY: CONFLICT AS TO TITLE: THE COMPANY NOT TAXABLE FOR, IN THE YEARS 1857 AND 1858.

By an act of Congress of the 8th of August, 1856, certain lands were granted by the United States to the State of Iowa, to be by the State conveyed to the Des Moines Navigation and Railroad Company, for the purpose of improving the navigation of the Des Moines river. This act contained provisions limiting and directing the times and proportions of the conveyance of the lands to the company; making this dependent upon the previous outlay of money, upon the works of improvement. The General Assembly of Iowa accepted the grant on the 9th of January, 1847; and the contract between the State and the Company was entered into on the 7th of June, 1854. The Register of the Des Moines River Improvement on the 14th of May, 1855, and the 6th of May, 1856, certified the land in question, which is situated in Pike County, to the Company. The Governor, however, refused to execute a patent for the land until the 3d of May, 1858; a patent was then executed and recorded on the 16th of the following June. The taxes for the County of Polk were by law to be completed by the second Monday in April in each year, thus the assessment of taxes for 1858 was completed the month previous to the execution of the patent for the land by the Governor of the State.

The question to be determined was, whether the company were liable to be taxed for the land during the years 1857 and 1858. The County of Polk, the defendants, contended that the title to the lands passed to the Company by operation of the Register's certificate executed in 1855; and also that the contract between the State and the County was a sale of the land on credit, which was subject, by statute, to taxation. The Company, on the contrary maintained that the title to the property did not pass to the Company, but was vested by Congress in the State, where it remained until the issuing of the patent by the Governor. Consequently, the County had no power to tax them for these two years, and they institute these proceedings to enjoin the County of Polk from collecting the taxes they had levied. The District Court rendered judgment in favor of the defendants, and the plaintiffs then appealed. The following is the opinion of the Supreme Court reversing the decision of the court below.

WOODWARD, J.—The question presented is, whether the lands in question, conveyed to the complainants by the State, in June, 1858, were taxable for the usual State and County purposes, prior to the date of the conveyance.

The provision of the code exempts from taxation "the property of the United States, and that of this State." It then becomes a question as to whether the lands were the property of the State, or of the petitioners. The complainants contend that these lands so appropriated, and commonly called "The River Lands" were the property of the United States or of the State, until the delivery of the patent by the State to the Company, in June, 1858, and therefore, were exempt. On the other hand the respondents urge the second clause of section 456, which declares that lands and town lots, including lands brought from the United States and from this State; and whether bought on credit or otherwise are subject to taxation. And they argue that the contract between the State and the Company of June, 1854, was a sale on credit within the above section; and second, that the certificate of the Register of May, 1855, and May, 1856, operated as a conveyance. As emphasis is undoubtedly laid upon the language of these papers, it is given in substance. That of the first date runs thus: "I certify that the following lands were sold by me on this 14th of May, 1855, to the Des Moines N. & R. R. Co., in pursuance of the contracts and agreements with said company for the construction of the Des Moines Improvement"; which is signed by the State Register of that work. The second is as follows: "This certifies that the following land being a part of the land appropriated, etc." "have this day been transferred, and are hereby conveyed to" the said company in consideration of $144,657 71 expended in pursuance of the contracts, etc., between the State and the said company.

We are well satisfied that the lands were not the property of the Company so as to render them subject to taxation at the times in question. This was not a purchase on credit, in the sense of section 456, above cited. This provision was enacted some time before this contract was made and therefore could have no intended reference to it. Its material allusion is to those cases which may properly be termed purchases of lands bought on time from either the State or the General Government. Purchases under the pre-emption laws, giving time for payment, and those of the school lands of this State, are plain subjects of this provision. In these cases the party enters into possession and has the use and enjoyment of the lands prior to payment, and this it is which constitutes the justice of the enactment.

The words implying a sale or conveyance in these papers can have no such force. The Register had no authority for this; it was not within his power. By the terms of the act of Congress granting the lands for the express purpose, the Company was first to expend money upon the work, and these lands to a certain relative amount were to be conveyed to them, and so, from time to time, as the work progressed. And in no case was the Register empowered to convey. He only certified to the amount expended by the Company, and the quantity of the land to which this entitled them, and the deed of patent was by law of the State to be signed by the Governor.

But i is contended that the restrictive and directory provisions of the granting act were in effect released by an act of Congress of the 3rd of August, 1854, which enacts that "where lands have been or shall be granted to a State by law of Congress, and such law does not convey the fee simple, or require the patents to be issued therefor, the lists thereof, certified by the Commissioner of the General Land Office, under his seal of office, shall be regarded as conveying the fee simple of the lands peoperly included in such lists." We are unable to see how this act should affect the terms, conditions, or objects upon and for which the grant might have been made. It goes no further than to affect the mode by which the title may pass, dispensing in some instances with the patent, but in no sense releasing from conditions or trusts annexed to the grant. Therefore, though the State might acquire her mere title by such a list, still the object of the gift and the mode of dispensing it in detail, as the work progressed would remain.

Did the company buy these lands of the State upon a credit? In view of the position of both parties, let us look at the entire transaction. Here is a great public improvement to be made, and here are supposed to be something like a million of acres of land appropriated for that purpose. The State makes a contract with a company to carry on the improvement and take lands as a remuneration. But the act of Congress has anticipated the contingency of the whole passing into their hands, and the work being then neglected, and has provided that it shall be meted out only in proportion to the progress of the improvement. This intention, this policy would be entirely defeated, and the specific direction disobeyed, if the lands could be held to pass to the company by either of the modes above contended for. The idea that the lands pass by virtue of the contract, is met in the outset by the difficulty that they are not yet ascertained either in quantity or in specific description.

The contract is not, properly one of sale. To the State the main object was to obtain a certain large internal improvement. The other party is to perform this work and take his compensation in lands, receiving them in proportion as it progresses. This contract is so similar to the prior one with another company (Bangs, Bros. & Co.) that if this can be construed as conveying the title, so must that, and the result would be that they belong to that former contractor, unless the State has taken some measure to divest them.

In the act of 25th of January, 1855, we find a distinct provision by what means the title shall be conveyed. "No patents or conveyances of Des Moines Improvement land shall issue, except upon the written requisitions of the commissioners thereof," and all patents were to issue from the State Land Office, and were to be signed by the Governor and to be recorded by the Register. This provision indicates the object of the certificates in question, and limits their expression and intent although the officer may have thought that he was possessing the very title.

Finally, the legislation of the State has uniformly recognized as the fact, that the lands remained in it until a regular conveyance of them; and that no right in them, save an *inchoate* one, was transferred by the contract. We conclude that the State had no right to tax these lands,

as property of the Company, until she had conveyed them.

One question, however, remains. It is whether the lands whose title was acquired in June, 1858, should be placed in the assessment of that year. We are of the opinion that the true sense of the law is, that if one acquires his title from the government after the close of the assessment, the land is passed for that year. It cannot be brought up as omitted property, and if it can be held subject for any reason, it may be brought into the list, though obtained in however short a time before the next list is begun. Such a course would involve an inequality and injustice. This land not having been obtained from the State until June in 1858, was not subject to taxation for that year. The judgment of the District Court is reversed.

The Yorkshire Iron Works.

I cannot probably give a more intelligible account of the iron manufacture of this district by describing the Bowling Works, than by dealing in generalities. In nearly all respects they are a counterpart of other works in this small district. Here are six blast furnaces, having stacks forty-six feet high, both boshes nine and eleven feet diameter. The blast is not heated, which issues a much better quality of metal, though a much less yield is obtained. About seventy-five tons from each furnace is the weekly product. For fuel, all coke is used, which is prepared near the furnaces, one half in closed kilns and the other in exposed beds, the coal yielding approximately sixty-six per cent. There is rather more loss by exposing the coking process, but a purer product is obtained. To reduce the calcined ore, thirty hundred weight of coke are required for a ton of iron. The ore yields, as ascertained by the consumption for a long series of days, in its raw state, 30.95 per cent. of iron; in its calcined, 42.9 per cent., which is quite equal to the best of our argillaceous carbonates, and considerably exceeds the greater part of the "clay bands" of Great Britain, some of which yield as low as 20 per cent., but such are not used alone. The burning of the ore, which is generally done in heaps elsewhere, is here more thoroughly effected in kilns. The kilns are about twenty feet in height, and in rows, with a tramway running over and between them, so that the ore and fuel are discharged from the cars without re-handling, as they arrive from the mines. The lower openings from the ore and the coke kilns are on a level with the tunnel heads of the furnaces; as are also the beds of coke prepared in the open air.

About forty-nine pits are kept in working order to supply these six furnances and the refining, puddling and reheating fires; and these are connected to the works by over forty miles of railway, on which locomotives are used for draught. The worked seam of ore averages about thirty inches in thickness, but contains more or less shale, and yields on an average three thousand five hundred tons per acre. The coal seams average about twenty-four inches.

With this description the working of the furnaces may be understood, and we will pass to a description of the refining processes.

We here start with pig iron already much superior in purity to those varieties we have described before in this series of letters. It is not only made from a purer ore and coal, but with a cold blast, that does not impart to the iron certain impurities, the nature of which has not been ascertained to our entire satisfaction, but is probably owing to a proportion of sulphur, and possibly silica. This pig metal, however, is run through refining fires—which consists in melting the pigs with coke, and running the metal into open cast iron moulds, and when the whole casting is out it is chilled yet further by a stream of water. Of these refining fires there are five, of unusually large size, in which forty hundred weight are melted at a time during the day, and fifty hundred at the last heat. It is here broken by the men with heavy sledge-hammers, then weighed into parcels for puddling, and wheeled to the furnaces.

Small iron trimmings are thrown into furnaces to facilitate the balling process, as it also serves to retain a larger proportion of carbon in the iron, and gives it somewhat of the nature of steel. Blooms or balls are made, weighing very little if any more than one hundred pounds each, and are well compressed before leaving the furnace. Vertical steel hammers are used for shingling, of which there are three for this purpose. The balls are more carefully and thoroughly cleaned than I have seen in any other district in Great Britain, beginning with light, and finishing with rapid and heavy blows, and compressing the blooms into thin slabs—about one and a half to two inches in thickness—and nearly square. These slabs are allowed to get cold, and are then broken into six pieces of nearly uniform size. An upright fall, worked by power, is used for breaking, the operation being done quite rapidly, only one machine being used in the works. After this the fragments, which are nearly square, are piled with covers for reheating, and when heated properly are rolled into bars for refining again, which is successively done from four to six times. Other qualities of pig will not bear this succession of refining without causing more loss; and when refined will yet have more or less of the original properties of the pig metal. Even when red shortness is rectified to a considerable extent by union with cold short iron, the product has not the tenacity of a metal which is originally free from those curious properties. At these works, the locomotive tyres have a fracture showing a crystalization very similar to steel, though it is not called such; and its strength is fully equal to the best puddled steel, while in uniform homogeneity it far excels.

When puddled steel shall be made from the purest of pig iron, and will allow of being refined by successive re-rolling without losing its nature in part or whole, and admit of uniform results through this series of refining, *then* we shall have puddled steel which will be what many men are now supposed to believe it to be—reliable. It seems probable that for some purposes the puddled steel will answer the best of purposes, but where there is a liability to an irregular expansion and contraction, as of sheets, it is a question whether flaws and fractures will not develop weakness which iron could not be likely to show. I hope to enter into this subject more fully under the head of steel manufacture, and if I am wrong in my judgment of this and other new processes, no doubt practical men will be able to show me the evidences of my error.

These animadversions are properly introduced in this place, because they serve to illustrate my earnest impressions, if not the fact that neither good iron nor steel can by any possibly means be made from ores that are originally good—that have neither red nor cold short giving qualities; and further, from ores that do not possess those elements which serve to thoroughly flux the iron in its successive purifications. What these elements are we cannot always determine. As for other essential provisions in producing reliable steel in the puddling furnace, they may be discussed in an other connection.

We return to the description of the Bowling Works. Twenty-eight puddling furnaces are used, each yielding about twenty-nine hundred weight of iron to the turn. In rolling, the forms were not reduced so rapidly as I have usually seen. In the heating of the piles of iron, it appeared to me that more than usual care was taken in the use of welding loam. For boiler plates the slabs are dressed by helved hammers. For tyres, axles and special work, six steam hammers are used, one of which is seven tons in weight, the same as the large one at the Reading Forge, Pennsylvania. Bars and rods that are rolled to medium and small sizes have an exceedingly fine fibrous texture; and they admit of twisting into knots and other various close bendings while the iron is cold, without fracture. Products of the mills of this district return an average of £25 sterling per ton, or more than double the average yield of mills producing ordinary "best" refined bars and rods. Boiler plates thirty-four feet in length, have been rolled for government use. Connected with these works are various shops, for forging, casting, and machine and boiler making.

At Bowling I was shown some specimens of iron ore from the north of Ireland. One is a brown hematite, similar in structure to the "pipe stem" ore of the Juniata district, Pennsylvania. It is supposed to be very pure, and likely to produce a quality of iron like that of Juniata. A furnace is about to be put upon smelting this variety, the ore to be imported from Ireland. Another specimen from the same vicinity is a magnetic variety which shows its transition character, evidently having been brown hematite at some former period. It is analogous to an ore found near Christiansburg, Montgomery county, Virginia.

Lest silence respecting the best qualities of iron made in the United States should be construed into a disposition to ignore their prediction, or to cast an inflection that the elements are not in existence, I would simply say at this time, that we certainly have the elements, probably in a greater variety than any other country on the face of the globe; that we have all the talent that is essential for management and manipulation, and that the market is almost unlimited in extent, if looked after with reasonable tact. As our mechanical and civil engineers become better acquainted with the diverse and special qualities of iron, will they allow much better prices for that which they particularly need. Present expediency, and as well, also, indifference, have made iron masters disregard the special valuable properties that belong to the best of that they are able to make. In this respect rolling mill managers are as much at fault as blast furnace proprietors. The interesting features of American iron, that correspond in part or whole to the Yorkshire cold blast product, would require a letter by itself.—*Correspondence of the N. Y. Evening Post.*

Results of Trials of Varieties of Iron Permanent Way.

Among the proceedings of the London Institution of Civil Engineers, was the following paper prepared and read by Mr. F. Fox, C. E. It was printed in Newton's *London Journal* of March, 1861:

The author stated, that he did not wish to be thought an advocate for the superiority of either of the systems tried over other plans, or of iron over timber for permanent way, under any and all circumstances; his object being merely to record results of actual trials, and the conclusions to which they led.

In 1853, an experimental length of a quarter of a mile (double line) of iron way, on the principle of Mr. I. J. Macdonnell (M. Inst. C. E.) was laid on the Bristol and Exeter Railway. In consisted of a continuous rolled iron rail bearer, weighing, on an average, 83 1-2 lbs. per lineal yard, and 11 inches in width. The bearers were united by joint or saddle plates 30 inches in length, weighing 50 1-2 lbs. each. The bearers had a rise in the centre of 9 16ths of an inch, and a rib or tongue was rolled on the upper side, which fitted approximately into the hollow of the bridge rail. The rails originally laid weighed only 53 3-4 lbs. per yard. Between the rail and the bearer, a thin packing of pine wood was placed, the grain being in the direction of the length of the rail. The rails, the bearers, and the joint plates, were bolted together, the distances between the intermediate bolts being so arranged as to admit of a rail being readily turned by unscrewing the nuts, or of a new rail being put in, without "opening out" the ballast. Transoms, or cross ties of angle iron were placed at average intervals of 12 feet between the two lines. This system differed from the Barlow way, in having the rail or wearing surface separate and easily removable from the bearing surface; but, on the other hand, it considerably exceeded the Barlow rail in weight. After a wear of more than seven years, this length of iron way was in

good condition, and bid fair to continue so for some time to come. About one-third of the rails proved defective within the first two years and had been replaced by rails weighing 60 lbs. to the yard. The ballast, which was very indifferent, being a loamy gravel, had been well drained, and thicker packing, laid with the grain traversely to the direction of the rail, had been introduced. The bearers and joint plates, transoms, and rails, were supplied at £7 per ton delivered, and the cost per single mile of this arrangement, exclusive of the cost of matching and laying, was £1,936. The cost of a single mile of the longitudinal timber way, at the same period, taking the rails at the same weight and price, was estimated at £1,850. It should be mentioned that iron was then low in price, whilst timber was high. Owing to the undue lightness of the rail, both of these calculations were below the cost of a well constructed permanent way.

As this experiment appeared on the whole to have been successful, it was determined to extend the trial, by laying one mile of double line on this system, at a further distance from a station, so that all trains should pass over it at full speed. Some modifications were, however, made. The width of the bearer was increased to 12 inches, and its thickness was reduced to 9-16ths of an inch, so that its weight was 75 lbs. per lineal yard. At the same time the curvature was slightly increased. The pine packing (creosoted) was thicker, and at the rail joints pieces of hard wood, laid with grain lengthwise, were substituted. The rails weighed 68 lbs. per yard. The contract for the bearers, joint plates, and transoms was taken at £9 10s. per ton,—the cost of rails being £9 8s. 8d. per ton. This length was laid in July, 1857, where the line had not long before been re-ballasted with hard clinker ballast. The cost of a single mile, exclusive of laying, amounted to £2,511. One mile of timber way, laid with the same section of rail at the same time, cost about £2,254.

As these trials appeared to give a reasonable expectation of the greater durability and diminished cost of maintenance of the iron way, the author felt justified in recommending a further trial, on a more extended scale, and on different districts of the railway. As the rolling and straightening of the curved section of bearer was alleged to be difficult, it was decided to adopt a flat section. The bearing surface was increased to 13 inches, the centre rib was rolled 1 2 an inch deeper, and the weight was thus brought up to 48 lbs. per yard. Rail joint plates of a similar section to the bearer joint plates were bolted underneath the bearer at every rail joint. Although this addition had been found advantageous, the way was still weaker at the rail joints than at any other part. Additional intermediate bolts were used, so that the upper and lower sections of the way were held together as a girder. The contract for the bearers, joints, and transoms, was taken at £9 12s. per ton, and the rails being £8 13s. 1d. per ton, the cost per single mile was £2,571.

In order to test the comparative strength of the different sections of bearer, of rail and bearer combined as laid, and of the rail and bearer joint plates, a series of experiments were made, the results of which were given in tabular form. The distance between the points of support was 5 feet. Of the three sections of bearer only, that of 1853 (the first) showed the least, and the flat section of 1829 the greatest, deflection, under a load of about 5 tons; but in each case the ultimate strength did not exceed 7 tons. Of the three sections of iron way complete, that of 1858, with a rail weighing 68 lbs. per yard, rather the strongest. The ultimate strength was reached under laps varying from 19 to 21 tons. An experiment with the flat bearer showed, as was expected, the increase stiffness gained by placing the centre rib downwards, thus practically deepening the girder. The ultimate strength of the timber way was ascertained to be 28 1-2 tons, or 50 per cent. higher than the iron way. It was, therefore, determined still further to increase the section of the iron bearer. In this case the width of the bearer was 12 inches, and it was stiffened by a web underneath, 3 inches deep and 3-4 of an inch thick (a plan which was claimed by Mr. W. Bridges Adams). The weight was reduced to 75 lbs. per yard, and the contract for this section was taken at £9 per ton. To stiffen the rail joints (which had no plates underneath), and to secure the ends of the rails, an iron plate, having a tongue rolled on it, was used. This section of way has been laid too short a time to warrant any decided expression of opinion of it, as compared with the other sections; but as a length of between 4 and 5 single miles was under trial, it would soon be seen if it possessed any advantages. It was perceptibly stiffer to travel over, and the middle web gave it a firmer hold in the ballast than either of the other sections. The cost of a single mile was £2,385. This section was the fourth modification of rolled iron bearer under trial, the entire length being 14 1-4 single miles.

The partial failure of the Macdonnell way on the Bridport railway was then referred to; and it was asserted that it arose from the rails and bearers being too weak, and from a disregard of those appliances which the character of the gradients, curves, ballast, and subsoil rendered more than ordinarily necessary.

In May, 1858, a trial length, of a single half mile, of the cast iron sleeper way of Mr. De Bergue, was laid in immediate continuation of the Macdonnell way, and on the same kind of clinker ballast. Whilst still preferring a continuous rolled iron to any cast iron way, the author felt bound to state that not a single sleeper had been broken, the nuts of the bolts did not work loose, the rails wore very well, and with the exception of a little depression at the fished rail joints, the line kept as good a "top" as could be desired, and was as easily maintained, but it was more rigid. The cost of this arrangement per single mile was £2,-103, or £300 per mile less than the Macdonnell way of the same period.

The merits and defects of the continuous rolled iron permanent way were thus stated. The defects, or supposed defects, appeared to be: 1. The great cost, at present prices, almost precluding its adoption on a railway of limited capital. 2. The difficulty of getting the bearers rolled. 3. The possible increased wear of the rails. 4. The greater "wash" of all but very good ballast, inseparable from all iron ways, resting on or near the surface. And, 5. The difficulty of laying on sharp curves, and of keeping in place when laid. Its presumed merits were: 1. Greater economy in the long run, owing to increased durability. It was estimated that the cost of renewal of the longitudinal timber was £45, and of the iron way only £21, per single mile per annum, or less than half, without reckoning the considerable item of labor in the replacement of the timbers. 2. Saving in maintenance, and facility for packing, owing to no "opening out" being required. 3. The safety of the iron way, especially as contrasted with a timber way which had been long laid. 4. The facility of exchanging worn rails. 5. The preservation of correct gauge. 6. The lowness of the crown of the rail above the bearing surface. 7. Saving in the depth of ballast in the case of a new line. And, 8. The equableness of the motion, rendering it probable that less injury would be sustained by the rolling stock.

Lease of the Ohio Canals.

Pursuant to notice of the Governor, Auditor and Treasurer of State, the Ohio Canals were offered for lease at public auction, at the rotunda of the State House, on the 29th ult. Bidders were required to deposit with the Auditor of State $20,-000, in bonds or money, as a forfeit, in case they refused to enter into an indentiture of lease. There were three bids for the lease. The first was $20,000; the second $20,050, and the third $20,-075. The lease was struck off at the last named sum to Thomas Dugan of Portsmouth, who, we understand, represented a company of Kent Jarvis, Arnold Medbury, Thomas Brown, Thomas Moore, W. J. Jackson, and Thmas Cooper. The lease is for ten years, the annual rent to be paid semi-annually in advance. The lease and bond must be executed within five days from the day of letting, and the time will date from the approval of the bond. So the canals are out of the hands of the State for the next ten years.—*Columbus Journal.*

Interest and Dividends.

The Treasurer of the State of Illinois will, on and after the first Monday of July, 1861, until the 31st day of said month, be ready at the American Exchange Bank, New York, to pay the interest maturing on the first Monday of July, 1861, on the Public Debt of the State of Illinois. The interest then due and not called for prior to the 31st day of July will thereafter be paid only at the office of the Treasurer of the State of Illinois, in the city of Springfield, Illinois.

Holders of Illinois and Michigan Canal Bonds, where coupons are exhausted, are required to present the bonds.

The Jeffersonville Railroad Company will redeem, on the 1st day of July next, at the United States Trust Company, New York City, at the lowest offer below par, a part of its first mortgage bonds, agreeable to the provisions of a contract made between the company and the holders of the bonds, bearing date April 14, 1859. Offers for the sale of said bonds should be addressed, under seal, to the United States Trust Company, and indorsed, "Offer of the first mortgage bond, or bonds, of the Jeffersonville Railroad to the sinking fund;" which offers or bids will be received until noon of the 1st day of July.

The directors of the Buffalo, New York and Erie Railroad Company regret to be obliged to state that the available funds of the company are not sufficient to pay the half year's interest on the first mortgage bonds due on the 1st June, and that the company is obliged to avail itself of the three months' grace provided for by the mortgage, within which period they confidently believe that sufficient funds will be derived from the earnings of the road to pay the interest, of which due notice will be given.

Holders of the first and second mortgage bonds of the Ohio and Pennsylvania Railroad; first and second mortgage bonds of the Ohio and Indiana Railroad; first mortgage bonds of the Fort Wayne and Chicago Railroad, and of the construction bonds of the Pittsburg, Fort Wayne and Chicago Railroad, are requested to sign the contract for re-organization in the hands of John Ferguson, No. 35 Pine st. Holders of these bonds desiring to avail themselves of the benefits of the proposed re-organization, should call and sign the agreement without delay.

Messrs. Duncan, Sherman & Co., pay the coupons on the Albany City and Buffalo City bonds; also the coupons on the bonds of the Belvidere Delaware Railroad Company, due June 1. Also $13,000 Buffalo City 6 per cent. bonds, issued June 1, 1852; and $11,000 do., issued June 1, 1854.

The Delaware and Hudson Canal Company have declared a semi-annual dividend of three per cent., payable on the 22d inst., at the office of the company in New York.

The Chemung Railroad Company has declared its sixteenth semi-annual dividend of 4 per cent., payable on demand, at No. 30 Dey Street, New York.

The Portland, Saco, and Portsmouth Railroad Company pay a semi-annual dividend of three per cent. June 10.

Railroad Earnings.

The receipts of the Grand Trunk Railway of Canada for the week ending May 23, were $60,699 05
Week ending May 5, 1860 ..... 56,099 13

Increase $4,599 92
Total traffic from July 1st, 1860 ... $3,072,040 42
Corresponding period previous year 2,568,174 77

Increase $503,865 65

The report of the receiver of the Cincinnati, Wilmington and Zanesville Railroad for April is as follows:

GROSS EARNINGS.

From passengers, through		$87 34
" " local		4,636 16
" mail		767 35
" express		350 20
		$5,841 05
" freight, through	$503 88	
" " local	9,534 74	
		10,038 62
Total gross earnings		$15,879 67

EXPENDITURES.

Ordinary and working	$10,538 96
Extraordinary	712 71
Capital account	1,611 64
Total expenditures	$12,863 31
On hand April 1	$30,611 39
Cash received during April	21,229 02
Balance May 1	$51,840 41

The following is the statement of the earnings of the New York Central Railroad, for the month of May, 1861, compared with its earnings for the corresponding month of the previous year:—

May, 1861	$678,595 24
" 1860	551,699 52
Increase	$126,895 72

This is the largest May business of the line, with a single exception, in the nine years' history of its consolidation. The road has the advantage, at present, of the heavy receipts at Buffalo of flour and other produce from the Northwest, and of the interruption of freight and travel from the Southwest over the Baltimore and Ohio line. The following are the comparative May earnings for nine years:

May.		May.	
1853	$419,287	1858	$510,197
1854	510,820	1859	409,627
1855	633,381	1860	551,699
1856	710,554	1861	678,595
1857	655,256		

The May increase over last season places the earnings of the line for eight months of its current fiscal year, at $619,864, as follows:

	1860-'61.	1859-'60.
October	$810,803	$709,671
November	730,591	637,792
December	522,918	520,396
January	489,665	387,128
February	420,790	402,530
March	631,290	561,078
April	690,646	585,140
May	678,595	551,699
Total eight months	$4,975,298	$4,355,434
Increase this season		$619,864

The earnings of the Buffalo, New York and Erie Railroad for May, 1861, were $54,717 03
May, 1860 ..... 46,005 25

Increase $8,711 78

The earnings of the Hudson River Railroad in May, 1860, were $156,281 09
May, 1861 ..... 150,807 63

Decrease $5,573 46

The earnings in the month of May for the last four years were:

1858	$128,132 27
1859	141,268 92
1860	156,281 08
1861	150,807 63

The business of the Illinois Central Railroad for May of this and the preceding year was as follows:

	1860.	1861.
Traffic	$119,889 83	$217,517 75
Land sales	44,790 03	320,696 28
Cash collected	56,066 21	54,780 81

The following are the earnings of the Great Western Railway of Canada for the week ending May 31, 1861:

Passengers	$16,828 42
Freight and live stock	15,575 73
Mails and sundries	1,435 87
Total	$33,838 02
Corresponding week of last year	30,563 39
Increase	$3,274 63

North Missouri Railroad.

A writer in the St. Louis *Republican* approves the late action of the County Commissioners, in offering to release the North Missouri Railroad Company from the payment of interest that has accrued or that may accrue on the stock held by St. Louis county, amounting to $750,000, on condition that the State grant legislation designed to complete the road to the Iowa State line, and to build the Missouri Valley railroad. In the following remarks he gives the condition of the city's relations to the road, and proposes that it imitate the action of the county. He says:

The City of St. Louis holds $500,000 of stock in the North Missouri Railroad Company, subscribed at the time that it subscribed $500,000 to the St. Louis and Iron Mountain road. These subscriptions were made on condition that the Iron Mountain road should pay interest on the bonds of the city, issued to pay the subscription to it till it was completed to the Iron Mountain, and the North Missouri railroad until it was completed to Iowa. The Iron Mountain road has built only about eighty miles and is free from paying interest, whilst the North Missouri road has built twice this distance and is still paying interest. It has not been able to pay the interest for some time, and it is presumed that the city will follow the example of the county in holding out an inducement to the State to aid in completing the road to St. Joseph and to Iowa, by which its stock may be made of some value and the interests of the State at the same time promoted.

The County of St. Louis holds in the North Missouri road	$1,250,000
The City of St. Louis	500,000
Citizens of St. Louis about	100,000
Total held in County of St. Louis.	$1,850,000

Outside of St. Louis, other counties, and individuals along the line of the road hold stock in said Company to the amount of about $600,000.

The State will not be disposed to sacrifice for her citizens this large sum of money if it can be avoided, and will doubtless pursue a liberal policy in regard to those whose enterprise has led them to make such large contributions to develop the resources of the State.

This road has cost the State far less per mile than any other road, and as it passes through one of the finest, and as yet only partially developed portions of the State, without rivers or anything else to compete with it for trade that naturally belongs to it, there can be little question of its ultimately paying.

The Hannibal and St. Joseph road, whilst not a competing road, save for a very small portion of the natural trade that belongs to the North Missouri road, and without injury to itself. Arrangements have recently been made with this road, which it is believed will be carried out by both parties in good faith, and which will remove all future trouble. At any rate, when the Missouri Valley road is built, there will be two lines leading to St. Joseph from St. Louis, and this will make all go well and pleasantly after that.

In view of the large interests involved, we are glad to see this move on the part of the city and county, and we trust it will be generously met on the part of the State, and that all will be done that can be done by the State, to save the roads from sale, and complete the road to Iowa, and the Missouri Valley road to St. Joseph.

Cumberland Coal.

The supplies of Cumberland Soft Coal are temporarily interrupted by the War difficulties at and near Harper's Ferry. The demand for this description of coal is rapidly increasing, and the interruption of supply will be seriously felt, unless made up from some other quarter. On this subject the *Evening Post*, of Saturday remarks.

"Fortunately this supply may be had. The Blosburg regions, and especially the Fallbrook Mines, in Western Pennsylvania, produce a coal quite equal in every respect to that procured at Cumberland, and can be furnished as cheaply. These mines are in Tioga County, and are connected directly with the Seneca Lake, in this State, where the general depot is situated. From this point it is shipped by canal West and East. The arrangements for mining are on the largest and most efficient scale."

Atlantic and Great Western Railway.

The opening of the Atlantic and Great Western to the Philadelphia and Erie Railroad—the completion of the first 27 miles of the track west of this place—was commemorated on Wednesday last (15th inst.) by an excursion thereon. A party of guests, including our first citizens, with the cornet band, representatives of the local press, and others, at the invitation of the Superintendent, filled the cars with a gay load of ladies and gentlemen on the afternoon of that day.

Mr. Wm. Reynolds, President of the road; Jos. Hill, jr., Superintendent, and several of the Directors and stockholders of the road, accompanied the party. The first train west from this place then, with four car loads of passengers, started off at about half past 2 o'clock. The first few miles of the track are smooth and steady, having been finished some time since; beyond, it is newer and less complete, and will receive some perfecting work before regular trains are put upon it. Considering the speed with which the work has been pushed forward, however, the track is remarkably smooth.

Leaving the village of Columbus three or four miles behind, the train reached the intersection of the two roads, distant 27 miles from this place, and 60 from the junction of the A. and G. W. with the New York and Erie at Salamanca, the eastern end of the road. The company found themselves in the woods—the west end of the road being much like the other end in that respect. The excursionists waited a short time for the down train from Erie, and when it arrived gave three rousing cheers for the "union" between the two roads, the band played its liveliest air, the Philadelphia and Erie shook hands with the Atlantic and Great Western, and the wedding was finished.

The name of the new station at the intersection is to be Wayne. From Jamestown west the stations are: Ashville, Brokenstraw, Bear Lake, Pine Valley, Columbus, Wayne.—*Jamestown (N. Y.) Journal.*

United States Mint.

The business of the United States Mint at Philadelphia in May was as follows:

	No. of pieces.	Amount.
Gold coinage	385,857	$5,104,415
Silver coinage	1,697,000	269,210
Copper coinage	1,100,000	11,000
Total	3,182,867	$5,384,625

Total coinage executed during the months of January, February, March, April and May, 1861 $31,123,206

☞ Major C. N. Bodfish has been appointed Chief Engineer and Superintendent of the Chicago, Iowa and Nebraska Railroad, vice Milo Smith, Esq., resigned.

☞ Mr. Chas. G. Miller has been elected President of the Buffalo, New York and Erie Railroad Company, vice Mr. A. D. Patchin, resigned.

☞ The Tennessee and Mississippi Railroad Company, from Memphis to Grenada, has discharged its hands on account of its inability to pay.

Remarkable Locomotive Explosion.

The Chicago *Tribune* thus describes the recent explosion of a locomotive on the Michigan Southern Railroad:—

The train was due in this city at 8 P. M., and it consisted of two passenger cars and a baggage car drawn by the fine Manchester built engine, *Charles Butler*, No. 67. Conductor Curtis was in charge; George Nair, engineer. As the train was nearing Ainsworth station, the intersection with the Illinois Central Railroad, 11 miles from this city, the engineer sounded his whistle to break up, and the breaks were applied, when, just as the speed was checked, the boiler exploded with fearful violence, tearing away the "crown sheet" downward through the fire-box.

The effects of the explosion were terrific. The heavy machine, weighing 23 tons, by the downward and lifting force, leaped bodily from the track into the air, turned a summersault, and landed reversed and bottom side up a distance of 354 feet from where the accident took place.

This seems incredible, but is shown by actual measurement. The train was running at the time at about 15 miles an hour, but had been running at high speed. There were on the engine the engineer, Mr. Nair, his fireman, Charles Stelp, and the track foreman, named W. Anderson—the latter sitting on the cab seat. Mr. Nair was thrown into the air and to one side, landing near the fence senseless, but not dangerously though severely injured. None of his limbs were broken.

The other two men—Stelp and Anderson—were probably instantly killed, the former being frightfully scalded, his clothing being torn from his person. Both bodies were taken from the ruins of the tender and baggage car. No other person in the train was injured, though several were buried in the sudden shock and halt of the train. The track was torn up for a distance of several rods.

The track of the Pittsburg, Fort Wayne and Chicago, at this point, runs for some distance closely parallel to the Michigan Southern track; and on the former, a passenger train due here at the same hour was approaching the city. The passengers in each were watching the other, when suddenly the persons on the Pittsburg train saw the engine leap into the air, with the crash and ruin that followed. The suddenness and appearance of the disaster is described by one of the passengers as to have produced, at first, the impression that, by some fiendish malice, the train was blown up by powder placed beneath the track.

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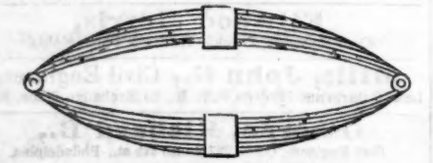

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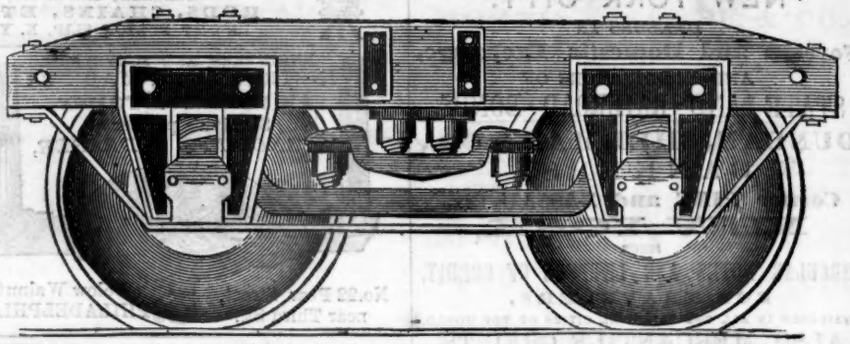

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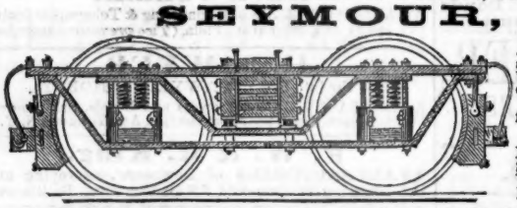

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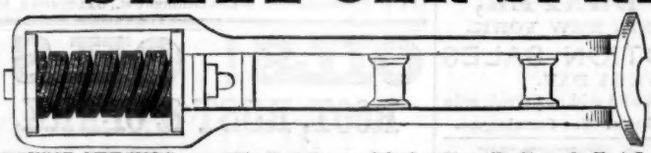

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